Military Effectiveness in the Long War

A Monograph
by
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Abstract

MILITARY EFFECTIVENESS IN THE LONG WAR by MAJ James W. Wright, US ARMY, 75 pages.

Efforts to measure progress in the US War on Terror are frustrated by a complex strategic situation and a shadowy network of enemies. The "Long War," as the conflict is referred to by many public officials, is likely to remain costly in human and financial terms. Some have suggested that the war will continue for a generation, giving the US ample reason to make sure it is optimally prepared for a long fight. One opportunity to examine the health and endurance of the US war effort lies in the concept of military effectiveness.

Military effectiveness is the process by which a military converts its available national resources into fighting power. Contributions from multi-disciplinary researchers, like historians Williamson Murray and Allan R. Millett, provide a foundation for conceptualizing effectiveness in an intellectual sense. Effectiveness is derived from the application of necessary strategic resources (means) in the right proportions (ways) to achieve specific goals (ends).

Designing a methodology to assess a nation's military effectiveness in a Long War requires a sophisticated understanding of the three central features of the conflict: protractedness, irregular warfare, and ideological motivation. The Military Effectiveness Model is built around these traits and analyzes effectiveness across four levels of military activity: political, strategic, operational, and tactical. By focusing exclusively on three requirements necessary for victory – endurance, legitimacy, and deterrence – one is able to render judgment about very specific aspects of effectiveness in a Long War.

The Military Effectiveness Model must be validated against historical experience. The French experience in the Algerian War from 1954-1962 provides an insightful case study that invites useful comparisons to the current US situation. In Algeria, success at the tactical and operational levels could never compensate for strategic incoherence and a lack of political support. The war in Algeria accelerated erosion of the French military's effectiveness, leaving the military weak and ill-prepared for future conflicts.

The US military finds itself in a precarious position with regard to military effectiveness and is exhibiting many of the same symptoms as the French Army in Algeria. While popular support for military operations is in decline, requirements for funding and manpower are increasing. Questions of legitimacy and strategic incoherence continue to undermine the war effort. US military effectiveness will continue to erode for the foreseeable future until balance is restored to the process.

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INTRODUCTION

Is the US making progress in the war on terror? More than five years after the 9/11 attacks, there is still no precise measure for determining the success of American efforts in fighting the Global War on Terror (GWOT). In previous conflicts measures of success might have included territories conquered or enemies destroyed, but the US finds itself in a much more complex and challenging strategic situation. This ambiguity has frustrated efforts to identify the "enemy," bound the scope of the war, and instill in the American public a sense of national commitment.

The 'Global War on Terrorism' was the first official designation of the government's response to the acts of 9/11.

Useful as that designation may have been in mobilizing American support for policies the government undertook, it has been widely criticized as a poor choice of strategic language. Recently published national security documents refer instead to the struggle against Islamic extremism as the "Long War." The change reflects an attempt to dampen public expectations of decisive victory and place the conflict in language reminiscent of the Cold War, a conflict that President Kennedy similarly labeled the "long twilight struggle."

Most agree that the campaign against terrorism will endure for many years; some people have suggested that it will be a generational conflict. It is unsettling to think that the US will be at war for decades so there is ample incentive to make sure that the nation is optimally prepared for a long fight. One opportunity to examine the health and endurance of the US war effort is found in the concept of military effectiveness. The subject of measuring effectiveness has long been important to national leaders, policy makers, historians, and military planners who must be able to accurately assess military forces and their likely performance in war. Perceptions of military effectiveness influence military force structures, affect budgetary policies and priorities, and help determine national security postures. But the subjective nature of a concept as abstract as military effectiveness makes its calculation an elusive enterprise.

The biggest challenge to evaluating US military effectiveness in the Long War is obvious. The war is not over. Most academics assessing military effectiveness do so with the benefit of hindsight. It is impossible to gain perspective while in the midst of a historical event because the immediate and long term outcomes have yet to transpire. Simply speaking, the dust needs to settle before a complete rigorous evaluation of our military performance in this war can take place. In the meantime, the military needs a yardstick to gauge its adequacy. Ultimately, examining military effectiveness is less of a science than an art. Though the vast numbers of intangibles prevent a precise calculation of military effectiveness, a thoughtful assessment can prove enormously insightful. Thus, creating a model for evaluating military effectiveness is central to measuring progress in the Long War.

Using a methodology to assess US efficacy in the Long War will require several steps. First, the aspects of military effectiveness most significant to a Long War must be identified. This requires a shared understanding of the concept of military effectiveness. Some basic questions need to be answered. What is military effectiveness and how

can it be measured? What are the special characteristics of the Long War and which aspects of military effectiveness are most important under those conditions?

Next, the model must be validated against historical experience. The Long War is not perfectly analogous to any other event in modern history. The strategic context of the world has changed, but it is still helpful to examine conflicts that share similar characteristics. Though the US position in the Long War is unique in many respects, it is certainly not the first nation to fight an irregular, protracted war against ideologically motivated extremists. The French experience in the Algerian War from 1954-1962 provides an insightful case study that invites useful comparisons to the current US situation at the political, strategic, operational, and tactical levels.

Only after these intellectual conditions have been set is it possible to offer a disciplined assessment of US military effectiveness in the Long War. A multi-layered analysis will ask tough questions about key tasks the US military must accomplish to prevail in the Long War and offer a starting point for further methodological examination. The model can continue to be used as a tool to foster critical thinking about the viability of the military instrument in the Long War. Especially in light of the ambiguous strategic situation, US policymakers and defense officials would be wise to persist in challenging their assumptions about what constitutes effectiveness.

MILITARY EFFECTIVENESS

Before reaching any conclusions about US efficacy in the Long War, the vague and abstract nature of the term 'military effectiveness' demands attention. It is impossible to assess military effectiveness until one understands what it is and how it works. There are three main intellectual contributions to the subject provided by operations researchers, social scientists, and military historians. Their work can be used as a start point to create a broad, unifying, conceptual model to help visualize the process of generating military effectiveness. By highlighting the most meaningful techniques for conducting an assessment, the groundwork can be laid to design a methodology for assessing effectiveness in the Long War.

What is Military Effectiveness?

By its very nature, the concept of military effectiveness is abstract. Though the concept has been the focus of a generous amount of scholarship in the last thirty years, it has eluded a uniformly accepted definition and remains extraordinarily difficult to both define and measure. Evaluating the effectiveness of a military might seem a simple affair. In a detailed analysis of Arab military performance over the last century, one author offered, "Effective militaries are those that achieve the objectives assigned to them or are victorious in war." It is tempting to view victory on the battlefield as the essential indicator of 'effectiveness,' but this can be misleading. Highly effective armed forces may lose wars and highly ineffective armies may win. There are plenty of historical examples of effective militaries that are bested by less effective adversaries. The German Army, for instance, from 1914 to 1945, is widely regarded as a highly effective military organization, yet it managed to lose two wars. Likewise, history is replete with examples of ineffective militaries that emerged victorious, even if at a high cost. The American Continental Army never managed to match the proficiency of a uniformly superior British Army during the American Revolution, but still found a way to win. These examples illustrate that there must be other intrinsic qualities to military effectiveness beyond battlefield victory or the capacity to achieve a purpose. A more substantive definition is required.

¹ Lawrence J. Korb, "How well can we fight? For how long?" in *National Security Strategy: Choices and Limits*, ed. Stephen J. Cimbala (New York: Praeger, 1984), 42.

² Kenneth M. Pollack, *Arabs at War* (Lincoln, NE: University of Nebraska Press, 2002), 4.

³ Martin L. Van Creveld, *Fighting Power: German and US Army Performance 1939-1945* (Westport, CT: Greenwood Press, 1982), 174.

Military effectiveness is the <u>process</u> by which a military converts its available national resources into fighting power.⁴ This process captures a dynamic relationship between the national strategic resources (means), the conversion capability (ways), and fighting power (ends). A fully effective military is one that capitalizes on its strategic context and derives maximum combat power from the resources politically and physically available. The scope of this definition is broad because it must account not just for war fighting but also war making.

Why Study Military Effectiveness?

The *perception* of effectiveness of a nation's military power remains the ultimate yardstick of national power.⁵ Policymakers must have at their disposal a means to assess the likely performance of their own armed forces and that of their adversaries to guide foreign policy and frame military strategy. This assessment process may be as important as the true capabilities of the forces themselves, since perceptions of relative effectiveness contribute to deterrence in peacetime and help shape strategy in war.⁶ National strategy should be informed by a thorough understanding of capabilities, intentions, and likely effectiveness in combat.

The ability to *learn, adapt, and anticipate* are central to the success of any military organization. ⁷ These qualities demand that an organization conduct a continuous assessment process and possess a willingness and ability to transform. Inside the US, the 1990s debate on Revolutions in Military Affairs and the subsequent 'Transformation' initiatives reflect this desire. The assessment of military effectiveness helps guide this process of self-improvement and determines the direction and validity of transformation.⁸

⁴ Allen R. Millett, Williamson Murray, and Kenneth H. Watman, "The Effectiveness of Military Organizations" in *Military Effectiveness: The First World* War (London: Allen and Unwin, 1988), 2. I agree with the authors contention that the term 'military effectiveness' describes a process rather than a product. Viewing military effectiveness simply as a product ignores the interaction between the multitude of contributing variables.

⁵ Ashleigh J. Tellis and others, *Measuring National Power in the Postindustrial Age* (Santa Monica, CA: RAND, 2003), 133.

⁶ Allen R. Millett and Williamson Murray, The Constraints on the Waging of War: Military Effectiveness in the Twentieth Century (privately printed, 1984), 3.

⁷Eliot A. Cohen and John Gooch, *Military Misfortunes: The Anatomy of Failure in War* (New York: Collier Macmillan, 1990).

⁸ Fred Kagan has written several pieces analyzing effectiveness with respect to Transformation.

The analysis of military effectiveness is important to the budgetary and procurement activities of any government. National security is an enormously expensive enterprise. Rapid technological advances and the need to continuously modernize military forces have fueled enormous defense spending that prohibits budget allocations in other important areas. Strategists and budget analysts need to maintain a sense of efficiency as they match the resources available (means) to the nation's policies and goals (ways and ends). Budgetary stringency is necessary to maintain public support and long-term fiscal sustainability. Everyone has a vested interest in figuring out how to get the most 'bang for the buck.' The correct assessment of effectiveness helps guide proper resourcing strategies.

Lastly, policy makers and military leaders have a professional obligation to maximize their relative effectiveness. Military planners and intelligence analysts must have means to analyze probable wartime scenarios in order to draft war plans. An honest appraisal of capabilities and likely effectiveness is critical to their planning efforts. Most importantly, the high human cost of war adds a moral component to the examination of what makes a military more effective. A senior military commander remarked after the initial missteps of the Iraq War, "Winging it and filling body bags as we sort out what works reminds us of the moral dictates and the cost of competence in our profession."

Three Intellectual Approaches to Military Effectiveness

There are three intellectual fields that have significantly contributed to the current body of work on military effectiveness: military history, social science, and operations research. Each view the assessment process through a different lens that is shaped by whether they view the conduct of war as an art or as a science. Accordingly, theorists from each discipline have chosen to apply a wide range of quantitative and qualitative techniques to assess effectiveness. Some seek to emphasize the human dimension of a military and examine the quality of an army's personnel at the expense of materiel factors. Others have characterized military effectiveness as the quantifiable performance of weapon systems and small units, resulting in tangible measurements like 'combat power ratios' and 'correlation of forces.'

⁹ Williamson Murray, "Introduction," in *The Past as Prologue: the Importance of History to the Military Profession,* ed. Williamson Murray and Richard H. Sinnreich (New York: Cambridge University Press, 2006), 7.

¹⁰ Kenneth Pollack chose this definition that allowed him to examine specific cultural factors to explain the general ineffectiveness of Arab armies. Van Creveld chose to analyze what he called "fighting power" – the social, moral, and ideological attributes that made the German Army so effective in WWII.

¹¹ The late Colonel (Retired) Trevor N. Dupuy is an excellent example of an analyst that uses a mathematical model for ascertaining specific valuations on effectiveness.

There are advantages and disadvantages associated with each approach. Each discipline tends to view military effectiveness through its own lens. Operations research emphasizes a technocratic and quantitative approach that can overlook the influence of human factors, like leadership. Social sciences use comparative studies to examine the political, social, and cultural factors that contribute to military effectiveness, but by design limit their research to a small number of variables. Military historians can explore the performance of military organizations and the strategic context in great detail, but often their linear historiography prevents comparative analysis. The most meaningful studies of effectiveness have pursued a multi-disciplinary approach that combines techniques from each field. To better understand their utility, it is best to review them independently.

Operations Research and Systems Analysis (ORSA)

The extraordinary evolution of the physical sciences over the last 300 years has created a certain expectation that the quantitative methods of mathematics and the natural sciences can be successfully applied to areas like military affairs. One of the earliest practitioners of these techniques was Frederick W. Lanchester, an English mathematician and engineer. Lanchester's 'Power Laws,', derived from the statistical analysis of casualty rates on the Western Front during World War I, were a series of differential equations that related force ratios to attrition in combat. Though his models demonstrated an insightful look at the impact of modern weapons, his formula treated all other battlefield variables like leadership and morale as equal. Lanchester viewed battlefield effectiveness as the product of determining the proper force ratio and firepower.

As technology evolved, computing power increased, and weapons effects became more predictable during World War II, Lanchester's formulaic method of military modeling gave rise to a new field of analytical study called Operations Research. Practitioners used algebraic formulae to solve special combat problems that needed a scientific approach. The technique was successfully used to hunt submerged U-boats that evaded air and sonar search, and later expanded to cover bombing target priorities during the Combined Bomber Offensive (CBO).¹⁴ In the aftermath of the

James G. Roche and Barry D. Watts, "Choosing Analytic Measures," The Journal of Strategic Studies 14 (June 1991): 168.

¹³ Lanchester's A Study in Concentration was published in 1916. His laws describe how two forces would attrit each other in combat, and demonstrated that the ability of modern weapons to operate at long ranges dramatically changes the nature of combat—in the past a force that was twice as large had been twice as powerful, but now it is four times as powerful, the square of the power ratio.

¹⁴Brassey's Encyclopedia of Military History and Biography, 1994 ed., s.v. "History, Military."

war, the American defense establishment adapted many of the quantitative methods in determining requirements for force structures and weapons procurement, and the US armed forces were increasingly influenced by management models.¹⁵

Robert S. McNamara, during his tenure as the Secretary of Defense in the 1960s, exacerbated the trend towards quantitative evaluations of effectiveness. As America drew deeper into the Vietnam War, McNamara based his strategy of attrition on an elusive 'crossover point' that gradually escalated US troop levels with the expectation that there would be a point at which the resistance could no longer operate. The measures of effectiveness for this attritional approach tended to favor metrics like body counts and weapons caches seized. ¹⁶

Another indicator of the ORSA influence in defense decision making was the controversial doctrine that emerged in the mid-1970s emphasizing an "Active Defense" against Soviet aggression. It highlighted a new battle calculus derived from careful analysis of the Arab and Israeli experiences during the 1973 Yom Kippur War, when a new generation of long range anti-tank systems proved exceptionally lethal. The new doctrine, outlined in the publication of a US Army FM 100-5, was the result of a systems analysis approach to warfare that used computer-generated scenarios as a major analytical device and introduced the Army to numerical force ratio guidelines for combat. ¹⁷ Military effectiveness was predicated on maintaining a quantitative edge in technology and firepower. This type of thinking, tempered by the defeat in the Vietnam War, met with resistance; many in the defense establishment were uncomfortable with this approach. There was widespread dissatisfaction by skeptics who were "deeply suspicious of the predictive frictionless technological universe inhabited by McNamara and his collaborators, who had led the US to defeat and humiliation. They had learned...that quantitative indicators of theoretical efficiency were not merely irrelevant to battlefield effectiveness, but

¹⁵ Roche and Watts, "Choosing Analytic Measures," 168. This technique was originally known as 'Operations Research (OR)' - later evolved into 'Systems Analysis'. Roche offers the following explanation about the role of Systems Analysis -- Systems analysis is a reasoned approach to highly complicated problems of choice in a context characterized by much uncertainty; it provides a way to deal with differing values and judgments; it looks for alternative ways of doing a job; and it seeks, by estimating in quantitative terms where possible, to ID the most cost effective alternative." (198) See Roche for excellent discussion of analytical measures used to evaluated the CBO.

¹⁶ Allen R. Millett, "Clausewitz Out, Computers In – Military Culture and Technological Hubris," *The National Interest* (June 1997): 23.

¹⁷ Huba Wass de Czege, *Understanding and Developing Combat Power* (Fort Leavenworth, KS: privately printed, 1984), 2. It states that one can reasonable be assured of a successful attack if the ratio of opposing forces is 6 to 1. Likewise a successful defense can be expected if the ratio of attacking forces to defending is 3 to 1 or less. Wass de Czege asserts that "one should recognize several problems with such analytical methods."

its mortal enemy."¹⁸ These frustrations played out in an intellectual debate within the military and opened the door to more qualitative, rather than quantitative, approaches to assessing military effectiveness.

Social Science

Most social and political scientists assert that human affairs and international relations are governed by a series of discernible scientific principles that can render events predictable. Fundamentally, these disciplines have crafted essentially a science of social structures and politics that is modeled on the methodological assumptions of the natural sciences. Practitioners have enriched the study of military effectiveness by thoroughly examining discrete variables that shape it.

Political scientists involved in examining international relations have long used comparative studies to explore the relationship between governmental structure and military effectiveness. Several theories, summarized best as the 'democratic effectiveness theory,' postulate a strong correlation between democracy and military effectiveness. ¹⁹ Other explanatory variables studied include regime types, political control mechanisms, and ideology. ²⁰

Social scientists focus on the relationship between social structures and military effectiveness.²¹ Practitioners focus on the 'human' and social dimensions of military affairs. They have primarily examined intangible factors like the impacts of civil-military relations, cultural variances, economic prosperity, and the status of the military profession within society. Another key area of study within this field is the role of unit cohesion in military effectiveness.

¹⁸ Macgregor Knox and Williamson Murray ed., *Dynamics of Military Revolution* (New York: Cambridge University Press, 2001), 192. Political science is an offshoot of social science.

¹⁹ Stephen Biddle and Stephen Long, "Democracy and Military Effectiveness: A Deeper Look," *Journal of Conflict Resolution* 48, no. 4 (2004): 4. Dan Reiter and Alan Stam published this theory in 1998. Their study attributed this phenomenon to unique properties of democratic decision making, leadership styles, economic performance, and popular commitment to state policy.

Risa Brooks explores the negative impact of political control mechanisms within Arab regimes. She argues that Arab military effectiveness is hampered by political interference and overly-centralized command structures.

²¹ Some attribute the academic debate surrounding military effectiveness in political science/social science in the late 1990s to perceived tension between the Clinton administration and the military. Thus, 'civil-military relations' became another forum to examine military effectiveness.

Military Historians

Historians have been examining military effectiveness in one form or another since Thucydides chronicled the Peloponnesian War over 2400 years ago. Military historians, in particular, seek to evaluate historical military performance and explain why events have occurred. They offer a means to carefully examine the rich historical context surrounding a conflict, and determine hidden variables that may have influenced the military effectiveness of the combatants.

There has been a pattern and a movement to military history over the years and these trends have contributed to a wide variety of explanations of military effectiveness. ²² Early military historians pursue a narrative literary approach in the tradition of Thucydides, Livy, Machiavelli, and Mahan, focusing on the behavior of polities (city-states or modern nations) and the international environment in which they function. They generalized about the military behavior of these polities on the basis of historical performance. ²³ These historians produced a body of historical analyses aimed at identifying the universal truths of international relations, as well as political and strategic effectiveness.

A second approach was popularized by professional soldiers that demanded more attention be paid to the actual conduct of war fighting. The "Great Commander School" of historians chose to focus on the execution of battles and campaigns by chronicling the observations of successful military commanders. Their writings gave rise to the 'Principles of War' and an emphasis on codified doctrine. This approach endorsed a view of military effectiveness as the result of successful battlefield tactics and operational art. It remained focused exclusively on military organizations and their Commanders. The school of thought also explored the influence of personality and genius on military effectiveness.

After WWII, perhaps brought on by the United States' new reliance on a nuclear strategy, military historians sought less to understand the specific aspects of war than to interpret the role of military affairs and military institutions in human development.²⁴ Instead of focusing on the technical and tactical details of warfighting, this "war and society" model focused its energy on the structural and intellectual aspects of armed forces, policy making, and the impact of military institutions on their societies.²⁵ These ideas were wedded with those of social scientists, and the assessment of military effectiveness became focused on social structures and cultural concerns.

²² John Gooch, "History and the Nature of Strategy," in *Past as Prologue*, eds. Williamson Murray and Richard Sinnreich, (New York: Cambridge University Press, 2006), 48.

²³ Millett and Murray, Constraints, 3.

Dennis S. Showalter, *The Readers Companion to Military History*, s.v. "military history."
²⁵ Ibid, 207.

The biggest challenge for military historians has been the lack of a common, analytical methodology.

Traditional military historiography, written in a chronological fashion, using a narrative, rather than an analytical style, tends to examine one level of war (strategic, tactical, etc...) at the expense of the others. It is difficult to evaluate military effectiveness because so many variables were 'thrown in' in the attempt to provide historical context. In recent years, a more disciplined methodology was developed in response to frustrations with the "war and society" model, one that reemphasized the role of actual warfighting and attempted to examine the specific, unique nature and function of armed forces in the context of wider issues. 26

This unique historical analysis revitalized the interest in the use of military history as a tool in national decision making and led to a Department of Defense sponsored study in 1984. The Office of Net Assessment (ONA) commissioned the "Military Effectiveness Project," a large-scale research effort organized by historians Williamson Murray and Allan R. Millett through the Program in International Security and Military Affairs at the Mershon Center at Ohio State University.²⁷ Their expansive study included a systematic review of seven major combatants during the first half of the twentieth century. ²⁸ They evaluated and compared each country's performance during WWI, the interwar period, and WWII in an effort to shed some light on what characteristics made some countries militarily successful and others failures. Their scholarly contribution, published as a three-book series in 1988, was noteworthy for three reasons. First, Millett, Murray, and colleague Kenneth H. Watman, established a common analytical framework that remains an influential starting point for any historical assessment of military effectiveness. Second, they pursued a methodology that examined not just how military organizations fight, but also how they function within their larger political, social, and international environment. Third, their holistic approach made it possible to use historical analogies to compare the relative effectiveness of military forces.

²⁶ Critics argued that the "war and society" model was of little practical value in the study of warfare. The most work of military historians, according to their view, must also address the warfighting aspects of military affairs.

²⁷ The founder of the ONA, Andrew Marshall, understood that an accurate calculation of military capability was more complex than a statistical analysis of aggregate end strength and weapons systems. The concept of military effectiveness became important to the idea of a holistic net assessment that accounted for political, social, cultural, and ideological dynamics that affect military capabilities. Marshall and the ONA were interested in the concept of military effectiveness as a means to look for any asymmetric advantages over the Soviet Union. .

²⁸ The project was a comparative analysis of the performance of American, French, British, Japanese, Russian, German, and Italy forces.

Conceptualizing Military Effectiveness

Most of the intellectual 'heavy lifting' by the academic fields listed above has been focused on how to assess military effectiveness. Most analysts jump right in and focus their energy on looking for specific factors that have influenced a nation's military effectiveness within a specific historical timeframe. Very little time is spent and few tools are available to help visualize 'military effectiveness,' deconstruct its parts, and explain how it works. But, this should be the true start point of an evaluation process. In order to make an informed assessment on effectiveness one must be able to conceptualize the whole system in an intellectual sense. One needs to know what it is and how it works before rendering judgment on whether it is effective or not.

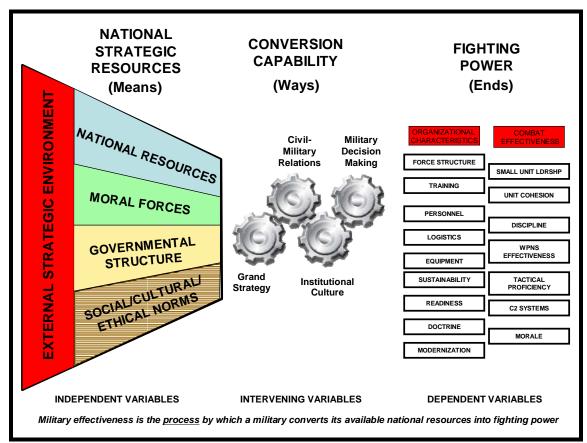


Fig. 1. Conceptual Model of Military Effectiveness

Military effectiveness describes the process by which strategic resources are converted into fighting power.

The systems design model in Figure 1 illustrates the relationship between the ends, ways, and means that generate effectiveness. It depicts three dimensions of a nation's military effectiveness: strategic resources (independent variables),

conversion capability (intervening variables), and military power (dependent variables).²⁹ The independent variables operate largely beyond the control of military forces and describe the strategic environment and resources that contribute to military effectiveness.³⁰ The intervening variables provide the prism through which the external conditions are filtered and affect military power. This dimension represents the military's conversion capability. Finally, the product of the environment and the conversion capability are reflected in the dependent variables which produce 'military power.'

The model in Figure 1 provides a basic framework to help demonstrate causal patterns and examine how changes in the independent variables affect intervening variables to change outcomes in the dependent variables. But, the relationship between variables in this system is not always stable and predictable. First, the relationship between the variables in the system is *dynamic* because the environment is always changing. Though the nature of war remains unchanged, the characteristics of warfare change over time. Requirements for an effective military force will change with the evolution of the strategic environment. Second, the system is *complex* because the relationship between variables can have a reciprocal affect on one another. For example, a nation's military effectiveness can directly influence the strategic environment; in this case, a dependent variable alters an independent one.³¹

The scope of the model is wide because it must capture many of the elements of the environment. Historian Peter Paret summarizes, "All recognize that war never has been, and is not today, a unitary or even a wholly military phenomenon, but a compound of many elements, ranging from politics to technology to human emotions under extreme stress." The process of generating military effectiveness cannot be limited exclusively to the realm of purely military activities.

Strategic Environment (Independent Variables)

Many factors that influence military effectiveness are largely beyond the control of the military. These independent variables provide the environment and resources that shape the organization and employment of military forces. While identifying every variable that influences military effectiveness is beyond the scope of this paper, the

²⁹ Michael J. Meese, "Defense Decision Making Under Budget Stringency" (Ph.D diss., Princeton University, 2000), 17. The systems decision making model provided by COL M. Meese in his PhD dissertation was useful in formulating this conceptual model of military effectiveness.

³⁰ Ibid.

³¹ Consider the case of a nation's military becoming so effective that other nations are threatened and feel compelled to change their own security posture.

³² Peter Paret, "Introduction," in *Makers of Modern Strategy* eds. Gordon A. Craig, Felix Gilbert, and Peter Paret (Princeton, NJ: Princeton University Press, 1986), 8.

independent variables fall broadly into five categories. First, the *external strategic environment* can have significant influence on military effectiveness. The perception of the threat posed by other international actors and the stability of the international system provide the backdrop for decisions with regard to the use of military force. International opinion and support are increasingly important to coalition building and successful military operations. Second, the availability of *national resources* is crucial to effectiveness. Some variables in this category might include: size of defense budgets, the availability and quality of manpower, and the efficiency of the defense industrial base. The third category includes the *moral forces* that contribute to effectiveness, like legitimacy and ideology. This category also encompasses the popular support a military force enjoys. Fourth, *governmental structure* drives resource allocations to military forces. The style of governance and the distribution of power within a country can affect the type and size of military forces. Lastly, the *social and cultural* norms of a nation may affect the way a military force is viewed within a society – and may even limit the way in which it is employed.

Conversion capability (Intervening Variables)

The capability of military forces to convert resources into fighting power represents the most important dimension of military effectiveness. There are four categories of intervening variables that help filter the external conditions to produce military power. *Grand Strategy* guides how the nation will employ its military force. *Civil military relations* denotes the relationship between the military and the civilians. It is an indicator of the level of access that the military leadership has in shaping strategy, informing policy and requesting additional resources. The *institutional characteristics* of the military are another key player in conversion capability.³⁴ These characteristics incorporate the notion of military culture which comprises the ethos and professional attributes derived from both experience and intellectual study that contribute to a military organization's core, common understanding of the nature of war.³⁵ These attributes are important indicators of the ability to innovate and adapt. The final and arguably most important category of conversion capability is *military leadership*. Decisions made by the senior leadership directly affect every aspect of military organizations.

³³ Tellis, Measuring National Power, 140.

This monograph offers a distinction between the <u>military as an institution</u> and the <u>military as an organization</u>. An *institution* represents a well established and structured pattern of behavior or of relationships that is accepted as a fundamental part of a culture. An *organization* represents a structure through which individuals cooperate systematically.

³⁵ Williamson Murray, "Military Culture Does Matter," *ORBIS* 7, no. 2, (1999) : 27.

Fighting Power (Dependent Variables)

Fighting power is the end state of the conversion process. The *organizational structure* category accounts for the force structure, training, personnel, logistics, equipment, sustainability, readiness, doctrine, and modernization programs of the military. These make up the overall capabilities of a force. 'Combat effectiveness' is the derivative of military power and consists of variables that account for a unit's performance on the battlefield. These variables include elements like small unit leadership, unit cohesion, discipline, weapons effectiveness, tactical proficiency, C2 systems, and morale.

Assessing Military Effectiveness

Like when facing any other higher order problem, it is useful to subdivide analysis into more manageable pieces. Historians Murray and Millet examined effectiveness by designing a methodology that dissected military activities into four separate, but overlapping, levels: political, strategic, operational, and tactical. Rather than pursue a meaningless aggregate valuation of effectiveness, they looked for indicators of effectiveness within each level of military activity that could be independently measured. This framework allowed them to assess military effectiveness across both a vertical (levels of military activity) and horizontal scale (breadth of tasks that a military organization must accomplish).

The political level focuses on the interaction between the public, the polity, and the armed forces. *Political effectiveness* involves the military's ability to secure the resources required to sustain itself through its relationship with the national government. Important aspects of effectiveness at this level might include popular support, legitimacy, predictable financial resources, a responsive military-industrial base, and a sufficient quantity and quality of manpower.

The strategic level is centered on the relationship between policy-makers and the military leadership. *Strategic effectiveness* is determined by the ability of the military to secure the "national goals defined by the political leadership."³⁶ Central to the ability to gauge effectiveness at the strategic level is determining any divergence between political aims and strategic goals. There is clearly a need for linkage between these goals. Political goals must inform military strategy, but strategic realities must also guide policy making. The military must have the ability to communicate candidly with political leadership about what goals are militarily possible. Therefore, analysis of strategic effectiveness would include probing for evidence of the reciprocal relationship.

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³⁶ Millett and Murray, "Military Effectiveness," 1: 6.

The operational level acts as a bridge between tactical activities and strategic aims. *Operational effectiveness* refers to the ability of a military to employ its forces to achieve strategic objectives as part of a military campaign. In contrast to the political and strategic levels, the operational level of military activity consists predominantly of actions by the military itself. These include establishing doctrinal concepts, preparing for combat, deploying forces, arranging logistical support, and directing joint forces. It involves the planning, preparation, deployment, and execution of operations in a larger campaign. Operational effectiveness can be driven in large measure by the personality of the commander. It requires an institutional appreciation for honesty – a prerequisite for good decision-making.

Tactical effectiveness refers to the combat effectiveness of units. It evaluates the applicability of the techniques used by these combat units to fight engagements and secure operational objectives.

Millett and Murray make two key assumptions about the characteristics of effectiveness. First, the authors contend that there is a clear hierarchy within the levels of military activity. The political level is more important to overall effectiveness than the strategic level, the strategic level is more important than the operational level, and so on. Failure at the tactical level may not guarantee a military will fail, but failure at the political level will surely result in catastrophe. Ongoing operations in Iraq arguably demonstrate this principle. Strategic ineffectiveness can render tactical effectiveness irrelevant or even counterproductive.

Second, it is highly unlikely that a military can be effective at all levels simultaneously. There are competing demands where effectiveness within one level of military activity may have an inverse effect on another. Consider a counterinsurgency scenario where a military force increases its presence and force posture to secure an area occupied by insurgents. The surge may make the force more tactically effective in the short term, but the increase in likely casualties taken as a result may decrease the political and strategic effectiveness in the long-term. A military may find itself tactically and operationally successful, but ineffective at both the political and strategic levels.

Another important characteristic to remember when assessing military effectiveness is that it is context dependent.³⁹ Evaluating effectiveness may rely on an appreciation of the military's changing environment. Consider two roughly analogous historical military situations:

³⁸ Harry Summers, *On Strategy: A Critical Analysis of the Vietnam War* (Novato, CA: Presidio Press, 1982). Colonel (Retired) Summers highlights this tendency throughout his book.

³⁷ Ibid., 1:3.

³⁹ Suzanne C. Nielson, "Civil Military Relations Theory and Military Effectiveness," *Policy and Management Review* 10, no. 2 (2005): 6.

"In June 1944 the Soviet Union launched Operation Bagration against the German Wehrmacht's Army Group Center in Byelorussia. Although the Germans were a veteran army defending well-fortified lines, the Soviets had tactical surprise and overwhelming material advantages. They had three times as many troops as the Germans, six times as many tanks, and eight times as many artillery pieces. The result was a total rout. Soviet infantry and artillery blasted huge holes in the German lines, and Soviet tanks and cavalry poured through the gaps and drove deep into the German rear encircling large formations.

Twenty-nine years later, in October 1973, the Syrian army launched a similarly massive offensive against Israeli forces occupying the Golan Heights. Like the Germans, the Israelis were a veteran army defending fortified lines, and like the Soviets, the Syrians had surprise and overwhelming material advantages on their side, having ten times as many troops as the Israelis, eight times as many tanks, and ten times as many artillery pieces. But, the Syrian offensive was a fiasco. Within two days the attack had run out of steam without accomplishing any of its objectives. An Israeli counterattack the third day of the war smashed the Syrian forces and drove them out of the Golan." ⁴⁰

In 1973 the Syrians had all of the advantages that the Soviets had enjoyed in 1944 – probably more – but they were unable to achieve the same results. Why under similar circumstances did one army succeed where the other failed? There were certainly cultural and social factors at play in the Syrian defeat, but the context of warfare had changed. The factors that made the Soviets operationally and tactically effective in 1944 did not make the Syrians similarly effective in 1973.

Summary and Implications

There is no simple explanation for military effectiveness. Operations researchers, social scientists, and military historians have taken different intellectual avenues of approach toward the problem of assessing effectiveness.

Operations researchers try to apply quantified common sense to the science of military affairs. Social scientists are able to standardize precise methodologies for comparative studies. Historians are able to convey the rich complexities of historical context. While each field has contributed valuable insights, no unifying theory exists on the best way to measure effectiveness.

Conceptually, maximum military effectiveness is derived by the efficient conversion of resources into military power. In an ideal realm, this occurs when a nation has properly applied the right ingredients (means) in the right proportions (ways) to achieve specific goals (ends) in a given situation. But, obviously, the nature of the dynamic and complex system depicted in Figure 1 prevents any precise calculation of aggregate military effectiveness. First, it's impossible to quantify. Second, there is no one cardinal factor that is ultimately responsible for effectiveness - though some are clearly more responsible than others. Ultimately, examining military effectiveness is less of a science than an art. Absent combat outcomes, it involves as much professional judgment, insight and intuition as it does science. It is not

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⁴⁰ Pollack, *Arabs at War*, 1.

enough to go by gut feel, nor by purely quantitative analysis. A meaningful assessment requires a multi-layered analysis that considers the depth of military activities and the breadth of historical context. It requires a deep knowledge of history and culture as well as a sophisticated understanding of the physical, cognitive, and human dimensions of war.

MILITARY EFFECTIVENESS IN THE LONG WAR

Attempting to evaluate military effectiveness while engaged in a war is a formidable analytic task. It is challenging enough to evaluate military performance with the benefit of hindsight and historical data. But, absent a final outcome upon which to measure relative effectiveness – and absent a symmetrical adversary to compare against – this task becomes infinitely more complex. Because of these limitations a carefully crafted methodology is essential. The purpose of this chapter is to devise such a framework. By proposing a set of characteristics that describe the Long War, and laying out specific indicators of effectiveness, a methodology can be constructed to invite historical comparison. This comparison will help test a theory about military effectiveness in the Long War.

Clausewitz and the Subjective Nature of War

Any discussion that involves the nature, character, or logic of armed conflict should begin by examining the ideas of the Prussian military philosopher, Carl von Clausewitz. As a nineteenth century theorist, Clausewitz captured complex truths about war that did not depend on relevance to a particular time period, technology, or belligerent. He argued that the nature of war was inherently dualistic. The 'objective nature of war' accounted for the universal characteristics of warfare found within his primary trinity of passion, reason, and chance. The 'subjective nature of war' explained the evolving character of war based on the ephemeral circumstances of the day, symbolized by his secondary trinity of people, government, and the army. ⁴¹ Clausewitz surveyed the methods of making war employed by different European societies since ancient times. He concluded that one should not seek a single theory of war to account for this subjective nature of war, but several different theories are necessary to explain the distinctive features in each epoch. The only immutable generalizations that could be sustained were those governing the psychological bases of human behavior under stress (objective nature of war).

Clausewitz asserted that it is the subjective nature of war that accounts for the evolution of warfare. "War is more than a true chameleon that slightly adapts its characteristics to the given case." ⁴² As the characteristics of warfare change, it follows that the requirements for winning war must change as well. If the requirements for winning war change, then the variables that influence military effectiveness must also shift. Thus, assessing military effectiveness in the Long War requires one first to examine its 'subjective nature' – its character, logic, and peculiarities.

⁴¹ Colin S. Gray, "Clausewitz, History, and the Future Strategic World," in *Past as Prologue*, eds. Williamson Murray and Richard Sinnreich (Cambridge: Cambridge University Press, 2006), 114.

⁴² Carl von Clausewitz, *On War*, eds. and trans. Peter Paret and Michael Howard (New York: Knopf, 1993), 101.

The Character of a 'Long War'

Clausewitz believed that the "first, the supreme, most far-reaching act of judgment that the statesman and the commander have to make is to establish the kind of war on which they are embarking, neither mistaking it for, nor trying to turn it into, something that is alien to its true nature. This is the first of all strategic questions and the most comprehensive." In the month that the United States entered the "Global War on Terror," Secretary of Defense Donald Rumsfeld predicted that the US would be involved "in a new kind of war against a new kind of enemy..." More than six years later, on the eve of his resignation, he remained convinced that America remained engaged in a "new and unfamiliar war that is not understood." His assertions highlight how difficult it has been for US policymakers and military planners to heed Clausewitz's advice and 'figure out the kind of war' they are fighting. They have been hard pressed to understand the adversary, define the scope of the conflict, and articulate the parameters of the Long War to the public. His approach is the scope of the conflict, and articulate the parameters of the Long War to the public.

If one accepts Secretary Rumsfeld's premise that the current conflict is "new" to history, then the value of historical analogy is null, and devoid of insight; without history, there can be no theory. But while certain aspects of the Long War may be unique to the American experience, the character of the Long War does share distinctive features with other conflicts in history. In order to pave the way for comparative studies, analysis, and theory development, it becomes necessary to make some generalizations about the character of the war.

While it is beyond the scope and purpose of this monograph to develop an authoritative list that appraises every characteristic of the Long War, the aim here is to expose the salient features of the war that allow it to be framed against other historical conflicts. For the purpose of this analysis, achieving an '80% solution' that allows for comparison is more useful than a '100% solution' that renders analysis impractical. A simple set of attributes will more than suffice to act as guideposts for the methodology outlined later in this chapter.

⁴³ Clausewitz. On War. 100.

⁴⁴ Donald Rumsfeld, "A New Kind of War," in *New York Times* (New York), 27 September 2001.

⁴⁵ Remarks of Donald Rumsfeld, Kansas State University, Landon Lecture Series, 09 November 2006.

⁴⁶ One of the clearest indications of this strategic confusion is demonstrated by the inability to name the conflict. The war has been called the GWOT, the "war against terror of global reach", "war on terror", "battle against international terrorism", and most recently, "the war against Islamic extremists/Islamo-fascists".

The character of the Long War is distinguished by three important facets: its duration, its mode of conflict, and by the motivation of the combatants. *First, the war is a protracted struggle*. The conflict will be measured in decades, not years, and will require the consistent application of national resources. In fact, some commentators have gone as far as to draw parallels to the Cold War where the struggle was identified as generational.⁴⁷ The Chairman of the Joint Chiefs, General Peter Pace acknowledged that terrorist campaigns have historically lasted decades, and he does not expect the adversary to capitulate anytime soon. "There's no reason to believe that these terrorists would have a time span in their minds of anything less."

Second, the Long War is marked almost exclusively by <u>irregular warfare</u>. The enemies in this war will not appear as traditional, conventional military forces, but rather as "dispersed, global terrorist networks that exploit Islam to advance radical political aims." Rather than targeting the military forces of the United States, the enemy's target becomes the political establishment and the decision makers. "[They] clearly understand the value of asymmetrical approaches when dealing with the overwhelming conventional combat power of the United States military." Asymmetric warfare in this context is best described as the means by which a conventionally weak adversary can fight and win against conventional opponent. Independent of success on the battlefield, the enemy seeks to achieve overall success through properly applied pressure, by kinetic and non-kinetic means, on public opinion and decision makers.

Third, there is a radical <u>ideological motivation</u> that drives the enemy. The principal of jihad is the ideological bond that unites this amorphous movement. A blend of political and religious convictions helps unify the otherwise loose organizational structure, diverse membership, and geographical separation of enemy forces. The ideological component drives the capacity to attract new recruits and stirs the passions that sustain morale.

By focusing on these three characteristics - protractedness, irregular warfare, and ideological motivation – one can more precisely examine military effectiveness within a specific context. This represents a crude attempt to 'figure out the kind of war' we are in. But narrowing the parameters of the conflict for the benefit of academic analysis has its

⁴⁷ James J. Carafano and Paul Rosenzweig, Winning the Long War: Lessons from the Cold War for Defeating Terrorism and Preserving Freedom (Washington, DC: Heritage Books, 2005), 3.

⁴⁸ "Pace offers clearer definition of Victory in Long War," *CongressDaily*, February 17, 2006.

⁴⁹ US Department of Defense, 2006 Quadrennial Defense Review, 1.

David W. Barno, "Challenges in Fighting a Global Insurgency," *Parameters* 36, no. 2 (Summer 2006): 15. Barno is heavily influenced by Colonel Thomas X. Hammes' theory of Fourth Generation Warfare.

limitations. Significant features of the Long War, like the global nature of the conflict, remain relatively underdeveloped in this study. This leaves the analysis contained in later chapters ripe for criticism that the context of the war is oversimplified. This charge would be valid, but the neglect to expand the scope is intentional. A balance must be struck between contextual accuracy and historical relevance. Comparison is useless without some level of symmetry between historical variables.

Armed with a set of characteristics that may account for the 'subjective nature' of the Long War, it is now possible to establish a more insightful framework to examine military effectiveness. Who else to turn to but Clausewitz when in search of a method to analyze warfare?

Clausewitzian 'Kritik'

Clausewitz provides a conceptual model for the analysis of warfare in Book 2 of *On War*. Aptly titled, "Kritik," or, "critical analysis," the fifth chapter forms the basis of his approach to war.⁵¹ Kritik has three steps. "First, the discovery and interpretation of equivocal facts...Second, the tracing of effects back to their causes...Third, the investigation and evaluation of means employed."⁵² Clausewitz did not believe that it was possible to reduce complex events to algebraic formulae, so he focused his 'kritik" on understanding cause and effect relationships in war. His method demanded a multi-layered approach because, "that which seems correct when looked at from one level may, when viewed from a higher one, appear objectionable."⁵³ Lastly, Clausewitz argued that historical analyses should be limited to a close study of a few, recent cases – rather than a broad, less meaningful sweep of historical events.

So with a nod to Clausewitz, the approach suggested below for assessing effectiveness in the Long War is conditioned by the underlying principles of 'kritik:' a multi-layered examination of historical cases focusing on identifying relationships that disproportionately influence military effectiveness.

⁵¹ Clausewitz, On War, 181. Paret and Howard translate "Kritik" as "critique, critical analysis, evaluation, and interpretation" rather than criticism.

⁵² Ibid, 181.

⁵³ Ibid, 184. Though Clausewitz did not specify which "levels" ought to be studied, this study will focus on the levels of war that were outlined in Chapter 1: political, strategic, operational, and tactical.

The Military Effectiveness Model

Once one has made necessary assumptions about the character of a Long War, there are four remaining steps toward assessing effectiveness. The first step entails *identifying the critical tasks* that the military must accomplish to prosecute the war to a successful conclusion. ⁵⁴ A useful technique to determine these is to approach the problem from the opposite perspective. In other words, what tasks if unfulfilled, or incomplete, would cause catastrophic failure in the war effort? ⁵⁵ The second step is to *disaggregate 'military effectiveness' into its component levels*. By dissecting the concept into various parts the analytical work becomes more manageable and meaningful. The next step is to *conduct a 'layered analysis'* that independently evaluates effectiveness at each level by measuring a military's ability to perform each key task. ⁵⁶ The analysis is facilitated by a matrix (see Figure 2 below) representing key tasks along the horizontal axis and the levels of effectiveness along the vertical. Analysis is conducted by examining indicators of effectiveness at each level – subjective questions that guide inquiry. The last step in the process is to *search for relationships between these levels of effectiveness to find trends*. It is this final step where one can determine which variables disproportionately contribute to effectiveness.

Identifying Critical Tasks

The 'critical tasks' that a military must accomplish correspond with the principal characteristics of the war itself. In the case of the Long War, there are three tasks that are essential to the U.S. military's overall success. First, the protracted nature of the struggle means that the armed forces must *maintain institutional and organizational endurance*. The military must preserve access to the physical and political resources necessary for the conduct of war. Furthermore, it must sustain its personnel and equipment in a conflict of varying intensity for an extended duration. Second, the

⁵⁴ Absent combat outcomes, it is impossible to predict exactly which 'key tasks' will be decisive to victory. Proving causality – that is, cause and effect relationships – is nearly impossible in a complex system. For the purpose of this analysis, it is adequate to identify those tasks that are necessary, but insufficient to produce a successful outcome. Variables that are unnecessary, but sufficient to trigger success are unknowable without the benefit of hindsight. Any prediction of such tasks would be speculative and not analytical. For an insightful look at the nature of causality, see Wesley C. Salmon, *Causality and Explanation*, (New York: Oxford University Press, 1998), pps. 68-91.

⁵⁵ Eliot A. Cohen and John Gooch, *Military Misfortune: The Anatomy of Failure in War* (New York: Collier Macmillan, 1990), 46.

⁵⁶ Ibid., 46. The term and concept of a 'layered analysis' to help visualize relationships between contributing factors is borrowed from Eliot Cohen and John Gooch. Their book – especially their analytical technique outlined in Chapter 2 - is a great start point for diagnosing complex military problems.

ideological backdrop of the war requires that *military actions must demonstrate national and international legitimacy*. A conflict born of ideas and religion cannot be won solely on the battlefield. Lastly, the irregular character of the war demands that *military capabilities and performance serve as a credible deterrent against future threats*. The military must be able to persuade or coerce leaders not to support terrorist organizations. It must demonstrate the tactical and operational flexibility to prevent the emergence of new threats.

Levels of Effectiveness

This examination will focus on the four levels of military activity outlined in the preceding chapter to provide a multi-layered assessment of effectiveness.⁵⁷ A brief description of each level is useful. In a conceptual sense, the political level of military activity contains the physical and political resources required for a military to function.

Effectiveness at the political level requires appropriate access to national resources. The strategic level is framed by the interaction of civilian policy makers and senior military leaders. Effectiveness at the strategic level demands a reciprocal relationship where policy drives strategy, but strategy informs policy. As opposed to the political and strategic levels, the operational and tactical levels are almost exclusively within the purview of the military. The operational level focuses on warfighting - the preparation, employment, and sustainment of combat forces to achieve strategic aims. Operational effectiveness results from the selection and application of appropriate doctrinal concepts. It requires consistent, wise senior leadership at the organizational level. The tactical level is focused on small-unit action, winning battles and engagements. Effectiveness at the tactical level is driven by the appropriateness of the techniques used as well as the equipment available for smaller formations.

Disaggregating the concept of military effectiveness is important for methodological reasons. First, because the concept of military effectiveness is so broad, it allows one to narrow the scope of the study to a more manageable level (ie examine only the political or strategic aspects of 'effectiveness'). Second, it enables one to examine the interrelationships between the levels of military activity. In other words, how does effectiveness at one level translate to effectiveness at another level?

Intuitively, there is an overlap between each of the levels. In reality the

⁵⁷ Intuitively, there is an overlap between each of the levels. In reality the lines are blurred, but for the sake of clarity here they are defined separately.

Ke Ta: Vertical	y Military Effectives Legitimacy	ctiveness Model (I	Long War) Deterrence
Levels Political Effectiveness	Does military have sufficient public support to secure resources it needs to wage war? • Does the war effort enjoy support of necessary international partners? • Does military maintain popular support at home? • What is the view of the military profession? Does the military enjoy public confidence that it will properly husband the resources of the nation?	Does military have access to secure needed resources for a protracted conflict? • Are military operations being conducted as part of a broad, unified, national effort? • Do military forces have access to the financial resources necessary for sustained combat operations? • Do military forces have access to necessary manpower reserves and national resources to replenish and sustain higher operational tempo?	Does nation demonstrate sufficient national resolve? • Do the government and the population share the same concept of the enemy threat? • Is their a common view of the national level of sacrifice necessary to win the war?
Strategic Effectiveness	Are the political aims and military objectives considered legal and justifiable? 1 o what extent does the international community support strategic aims? Does this facilitate a unified coalition effort? 1 o military leaders have ability to inform strategic decisions? Do policymakers and military leaders maintain a relationship of trust? 1 o what degree does strategy inform policy?	Is the military properly employed for a protracted conflict? Does the military have an adequate force size and structure for the war? Is there a mismatch between the ends-waysmeans for long conflict? Does the military have a voice in reassessing strategy?	Are potential threats deterred by our national military capabilities? • Ability to deny sanctuary to enemy? • Does military have ability to rapidly project forces? • Are military operations conducted as part of broad coalition effort?
Operational Effectiveness	Are military operations viewed as legal, appropriate, and legitimate? • How members of the military view their participation in the conflict? What is the effect of morale? • What is the ability of the military to tolerate risk? • Do members of the military view the cause as worthy?	Is military capable of sustaining operations over long period of time? **To what degree is the military force structure capable of handling a rotation of forces? **Can the military maintain its training base and professional military education system? **Can military continue to repair and replace equipment in its formations? **Is the logistics system capable of resupply during a prolonged conflict? **What is the status of procurement, research and development, testing and evaluation programs? Is military capable of maintaining its vision of long term transformation?	Do military operations deter enemies or force them to adapt? • Does military doctrine match reality? • Is military capable of rapidly adapting to enemy? • To what extent do military strengths match enemy weaknesses?
Tactical Effectiveness	Are methods employed in combat considered appropriate? • Are tactical actions conducted within perceived international standards of conduct (Jus in bellum)? • Are the techniques used by tactical formations consistent with strategic objectives?	Can individual units maintain combat effectiveness for extended duration? • Are individual units and personnel capable of prolonged deployment? • Are support capabilities sufficient for maintenance of tactical systems?	Do military forces demonstrate proficiency to deter enemy actions at the lowest level? • To what extent do tactical systems place the strengths of the military against enemy weaknesses?

Fig. 2. The Military Effectiveness Model for a Long War

Having identified the critical tasks and the levels of effectiveness, one can now begin the most fruitful step in the process: a layered analysis. The matrix in Figure 2 depicts an approach to assessing effectiveness at each level. Rather than broadly focusing on the overarching definitions of effectiveness presented above, the matrix fine tunes the four levels of effectiveness so that each have direct applicability to the characteristics of the Long War. Assessments for each level are guided by subjective questions that serve as general indicators of whether the military is capable of meeting its triple requirements for endurance, legitimacy, and deterrence.

Political effectiveness is subjectively determined by the answers to three questions:

Does the military have access to secure necessary resources for a protracted conflict?

Does the military have sufficient public support to secure resources it needs to win?

Does the nation demonstrate the resolve to win?

Political endurance demands a broad, inter-governmental effort, predictable and sufficient financial resources, and access to necessary manpower reserves, in terms of both quality and quantity. Legitimacy can be measured by popular support for the war effort at home and abroad, by the international support provided to the war, and by the view of the military profession. Political deterrence requires a common understanding about the war, the costs of failure, and the sacrifices that may be needed.

The assessment of strategic effectiveness is similarly guided by three questions:

Is the military properly employed to meet the demands of a protracted conflict?

Are the political aims and military objectives considered legal and justifiable?

Are potential threats deterred by our national military capabilities?

Strategic endurance is shaped of several factors. First, the appropriateness of the national military strategy is crucial. Is there clear linkage between the ends, ways, and means? And can the strategy be maintained over a long time horizon? Second, an adequate force size and structure contributes to the military's ability to respond to a protracted conflict. Legitimacy at the strategic level generally revolves around the *jus ad bellum* ("justice of war") considerations that began the war. To what extent does the international community support the nation's strategic aims? Strategic legitimacy is also concerned with the credibility of the military profession and the relationship of military leaders and policy makers. Do military leaders have the ability to inform strategic decisions? Are military leaders seen as honest brokers on the conduct of the war? Strategic deterrence in the Long War is predicated on the perceived ability to react faster than likely adversaries. At this level, deterrence stems from power projection capability and the ability to attract coalition partners to the effort.

The three questions that address operational effectiveness in the Long War:

Is the military capable of sustaining operations over an extended period?

Are military operations viewed as legal and justifiable?

Martin L. Cook, "Ethical Issues in Counterterrorism Warfare," in *Defeating Terrorism: Strategic Issue Analyses*, ed. John R. Martin (Carlisle, PA: Strategic Studies Institute, 2002), 71. 'Jus ad bellum' is a moral assessment on the use of military force. These considerations provide a framework to attempt to determine whether use of force to redress a given wrong has a reasonable hope of success and whether nonviolent alternatives have been attempted to redress the grievance.

Do military operations force the enemy to adapt new methods?

Operational endurance requires the military to maintain its normal functions while simultaneously meeting the ravenous demands of war. Some of the key considerations of operational endurance might include the rotation of forces, the ability to maintain a professional military education system, and the strength of the military's logistics system. Also significant to operational endurance is the capacity to continue modernization and transformation programs toward long-term goals. Operational legitimacy is framed by the morale of the military itself. How do members of the military view their participation in the conflict? What is the ability of the military to tolerate risk? Operational deterrence is the result of the proper employment of military forces.

Lastly, tactical effectiveness is considered by the following three questions:

Can individual units maintain combat effectiveness for an extended duration?

Are techniques employed in combat considered appropriate?

Do military forces demonstrate proficiency to deter enemy actions at the lowest level?

Tactical endurance focuses on personnel systems, the quality and continuity of small unit leadership, and the support capabilities to maintain troops and weapon systems in combat. Tactical legitimacy is concerned with the maintenance of *jus in bello* ("rules of war") legal and ethical standards by combat forces.⁵⁹ Tactical deterrence prevents enemy action against specific targets, or deters the enemy from using specific techniques.

Indicators of Effectiveness

The answers to the questions outlined above and in Figure 2 provide enough information for one to subjectively assess the relative 'effectiveness' of each level. But finding the 'right' analytic measures (or 'metrics') to render such judgments is difficult to say the least. There is an unbridled tendency to want to quantify everything and, unfortunately, a bad statistic can do more damage to one's analysis than no statistic. "Poor choices of measures could trap analysts into reaching mistaken, misguided, or irrelevant conclusions, and that even the best of measures, if pushed too far, could blind analysts to the broader aspects of the problem at hand."

⁵⁹ Cook, "Ethical Issues," *Defeating Terrorism, 73.* 'Jus in bellum' refers to the conduct of military operations. The central ideas concern discrimination and proportionality.

James G. Roche and Barry D. Watts, "Choosing Analytic Measures," The Journal of Strategic Studies, 14 (June 1991): 165. There are several common traps analysts can fall into when searching for the 'right' measurements. First, analytic measures can be perishable, meaning that their underlying value to the problem may change over time. ⁶¹

Second, measuring effects in warfare is difficult because effects can be out of proportion to the causes. Even establishing causal relationships is tenuous in a complex environment. Third, readily quantifiable measures may be misleading or not the right ones at all. Lastly, attempting to measure 'nonevents' – like the absence of terrorist attacks – is impossible because there is no way to probe for a cause and effect relationship. ⁶²

Given these limitations it is prudent to proceed cautiously. LTC Jim Baker suggests that there are two types of indicators: leading and lagging. ⁶³ A leading indicator suggests a future change in progress, while a lagging indicator demonstrates a change that has already taken place. Leading indicators are useful to forecast future performance while lagging indicators look at existing conditions. Both types of indicators are necessary to measure military effectiveness if one wants to account for both current status and future trends.

But, while the subjective questions in Figure 2 are universally applicable to each case study, the specific analytic measures required to answer them are particularly sensitive to historical context and national peculiarities. They will be different in every case.

Summary and Implications

Assessing military effectiveness should begin by looking at Clausewitz's 'subjective nature' of war and determining how well a military is properly suited to the character of the war. Has it properly identified and prepared itself for the principal characteristics of the conflict? The current conflict is marked by protractedness, its ideological nature, and its irregular warfare. How does the US military stack up against these qualities?

Without the benefit of hindsight it takes a sharp analytical knife to help one evaluate effectiveness. Rather than focus on the Long War as a conflict completely unique to history, this chapter introduced a methodology that invites comparison between the ongoing war effort and numerous historic conflicts. By disaggregating the concept of military

⁶¹ Ibid, 167. Roche and Watts offer the example of the machine gun to support this claim. It was originally measured by the same standards as an indirect fire weapon system and found wanting. Later, by the turn of the century, its real value was found to be as a direct fire suppression system.

⁶² Jeffrey Record, *Bounding the Global War on Terrorism* (Carlisle, PA: Strategic Studies Institute, Army War College, 2003), 21.

⁶³ Jim Baker, "Systems Thinking and Counterinsurgencies," *Parameters* 36, no. 4 (Winter 2006-07): 40.

effectiveness into four component levels (political effectiveness, strategic effectiveness, operational effectiveness, and tactical effectiveness) and by focusing exclusively on the key tasks necessary to win the war (maintain endurance, legitimacy, and deterrence), an analyst should be able to render judgment about very specific aspects of military effectiveness within the context of a Long War.

As the character of war changes, the requirements for winning it have changed as well. The paradox of the Long War is that tactical victory does not inevitably lead to winning the war. This lesson has been learned by many other nations throughout history and will be discussed further in the next chapter. In past wars military effectiveness might have been determined by territories captured and enemies destroyed, but the metrics required to measure military effectiveness in the Long War demand more nuance. Popular support, fiscal sustainability, and international legitimacy – while not sexy – may be better benchmarks.

FRENCH MILITARY EFFECTIVENESS IN THE ALGERIAN WAR

For fifteen years, from 1947 to 1962, the French military was torn apart by wars that it had neither the means nor the institutional capability to overcome. Its effectiveness was squandered by domestic turmoil, political intrigue, inadequate resources, and withering international support. In the aftermath of their ignominious defeat in the Second World War, the French military sought to restore power and glory to France, but in less than two decades what emerged was a chastened and battered force, shaken by an aborted coup d'état and distrusted by the French public. Their tragic fall from grace was hastened by a precipitous erosion of their military effectiveness. What were the conditions that led to this deterioration and ineffectiveness? Why was the French military ill-prepared to fight a Long War? Why did their success on the battlefield not translate into ultimate victory? How did their situation become so desperate that otherwise loyal officers began to pursue outright seditious and treasonous activities?

The Algerian War was the second of two successive colonial wars fought by the French armed forces in the aftermath of WWII. National honor demanded the preservation of *Algeria Française* (French Algeria) when the rebellion began on November 1, 1954. But as the fighting intensified and casualties mounted, French popular support for the war evaporated. Controversial war policies would topple six consecutive French prime ministers and bring about the demise of the French Fourth Republic. By war's end, the conflict nearly claimed France's great hero, Charles de Gaulle, and his Fifth Republic, and confronted metropolitan France with the very real possibility of civil war. The Algerian War, derisively labeled "The Hundred Years War," by French youth, met all the criteria of a Long War. It was *protracted* and costly, lasting eight years and claiming the lives of 18,000 Frenchmen. The war was *ideologically based* - the insurgents motivated by a potent blend of nationalism, religion, and to a lesser degree, communism. The war was marked by acts of terror and *irregular warfare*.

Background

The emerging Cold War between the US and Soviet Union dominated the strategic landscape and provided the global backdrop for the Algerian War. The international power structure had shifted in the wake of the Second World War - a condition that post-war French governments were ill-prepared to accept. The new realities of international politics highlighted a bipolar competition that was generally unsympathetic to France's concerns about her colonial holdings.

The French army was also slow to adjust to the new strategic realities. Events in the two decades preceding the Algerian War had profound implications on the effectiveness of the French military. First, France's shocking defeat in June 1940 dealt a serious blow to the psyche of the nation and the armed forces. The Compiègne Armistice, signed with

⁶⁴ Alistair Horne, *A Savage War of Peace* (New York: Viking Press, 1977), 415.

Germany on June 22, 1940, reduced the French military to less than 10% of its pre-war levels. ⁶⁵ The act of submission divided the professional military caste, which was forced to choose between maintaining loyalty to the Vichy regime and defecting to de Gaulle's Free French movement. ⁶⁶ Even after the French forces reunited under a common chain of command in October of 1943, mistrust, resentment, and divisiveness would continue to plague the officer corps. By 1946, economic exhaustion forced France to drastically downsize its military, providing an excellent opportunity for the senior military leadership to purge the Gaullist influence. The French military institution comfortably retrenched into its pre-war traditions.

In the aftermath of the Second World War, a succession of weak French governments in metropolitan France failed to cope with the rising tide of nationalism among its colonial holdings. The first major anti-colonial outbreak of violence occurred in Indochina. It was the first significant military challenge faced by France in the post-war era and in many respects would foreshadow the tragedy that befell the French Army in Algeria. Wrote Francois Mitterrand in 1957, "When the war in Indochina broke out, France was able to believe that the 1940 defeat was nothing more than a lost battle, and that the armistice of 1945 was going to restore its power at the same time as its glory." The war began with the pursuit of lofty political objectives established by successive weak governments in Paris. Despite its initial high expectations, the French military bogged down and the war became a protracted struggle. Still burdened by the reconstruction of metropolitan France, the cost of the war began to annually exceed what France was receiving from the Marshall Plan, a staggering figure that exceeded 10% of the national budget. Additionally, legal restrictions on the use of conscript forces limited the available pool of combat forces. Since escalating the war was not possible, senior military leaders began to pursue riskier strategies of seeking and achieving limited tactical victory, followed up by stalemate and peace negotiation on favorable terms. When Dien Bien Phu fell on May 7, 1954 to the Viet Minh, at a cost of 13,000

⁶⁵ Ronald C. Hood III, "Bitter Victory: French Military Effectiveness during the Second World War," in *Military Effectiveness*, eds. Allan R. Millett and Williamson Murray (Boston: Allen & Unwin, 1988), 3:221-255

The armistice reduced the 80 division French army to 8 divisions – 90,000 men in total. Horses replaced French tanks and artillery units given mules in lieu of motorized vehicles. The French Air Force was limited to 200 outmoded aircraft and the French Navy was essentially mothballed.

⁶⁶ Ibid., 225. Charles de Gaulle made his famous appeal to continue resistance on June 18, 1940. But de Gaulle never enjoyed the widespread support of the conservative, tradition-bound French military. At its peak in 1942, his Free French movement (FFI) had only encouraged 70,000 soldiers to defect toward the cause.

⁶⁷ Horne, Savage War, 175

⁶⁸ George Armstrong Kelly, Lost Soldiers: The French Army in Crisis 1947-1962 (Cambridge, MA: MIT Press, 1965), 67.

French dead, the war effort became politically unsustainable. The French government (the 20th government since the end of the Second World War) collapsed in favor of a leftist coalition that pledged an immediate end to the war.⁶⁹ In July of 1954, the Geneva Accords brought a cessation to the fighting in Indochina, and a battered and dejected French army began redeploying to metropolitan France.

The war in Indochina cost France 75,000 dead and missing soldiers. The French military had now suffered two humiliating defeats in fourteen years and felt betrayed by the lack of support from its civilian masters. If there was a silver lining to be found in its latest defeat, it was that the French army had learned valuable lessons on combating anti-colonial insurrections which would later be put to the test in Algeria. Professional soldiers, many of whom had spent time in Indochinese prison camps, returned to France and reexamined their military doctrine. They conceived that revolutionary wars are fought for the allegiance of the people and that the point of convergence of the effort is largely social and psychological, rather than military. They appreciated the need for education and social programs on one hand, and were willing to engage in propaganda, psychological programs, involuntary population resettlement, and political indoctrination on the other.⁷⁰

But of more immediate consequence for the French armed forces was its institutional fatigue and frustration. The French military emerged from the war feeling embittered by what they perceived as a lack of commitment and resourcing from the French government, and resolute that the Dien Bien Phu debacle could never happen again. The French Army was in a fragile emotional state. In the coming years as France sunk more deeply into an Algerian quagmire, the army, unable to forget their humiliating defeats, became convinced that Algeria was "a war that could not be lost."

Any fair assessment of French military effectiveness in the Algerian War must account for these three preexisting conditions – materiel exhaustion, institutional insecurity, and poor civil-military relations.

The Algerian Crisis

Two days' sail from France's southern ports, many Frenchmen considered Algeria an extension of France. As early as 1848, Algeria was declared a part of French soil, a fairly unique designation for a colonial possession and an early indication of her special relationship with the European power. In contrast to her neighbors, Tunisia and Morocco,

⁶⁹ Ibid., 68.

The French Army had pursued many of these policies in Indochina – but it was not until their return that they were formalized into a coherent doctrine. The most influential proponents of guerre revolutionnaire were Antoine Argoud and Roger Trinquier.

⁷¹ Kelly, Lost Soldiers, 143.

which were deemed simply French protectorates, Algeria maintained a civil government under the same framework as metropolitan France.⁷² By 1954, there were close to a million European settlers, variously called *pied noirs* (black feet) or *colons* (colonists), primarily residing along coastal towns in northern Algeria. This small but influential community wielded great political power in Paris and repeatedly subverted the political rights of Algeria's Berber and Arab majority population.

By the fall of 1954, the frustrations of inferior social status, weak political representation, unemployment, and poverty had fueled a widespread resurgence of Islam among the Algerian population.⁷³ This religious fervor was further channeled into nationalist sentiment by separatist groups like the *Front de Libération Nationale* (FLN). The anti-colonial cause was strengthened by seemingly successful insurrections in Tunisia and Morocco, and lively political debates in Paris about ceding independence to France's colonial possessions.⁷⁴ On November 1, 1954, the militant wing of the FLN, the *Armée de Libération Nationale* (ALN), initiated a terror campaign across the country while its political arm issued a manifesto calling for independence.

The war can be conveniently divided into four phases.⁷⁵ In the first phase of the war, from the All Saints' Day attack of 1954 to the fall of 1955, French reaction to the emerging crisis was slow and lethargic. French police and military forces garrisoned in Algeria in 1954 numbered less than 50,000. The military was tied down in Tunisia and Morocco, or in the process of being shipped home from Indochina. A gradual build up of forces steadily arrived in Algiers, and by September of 1955, there were 120,000 French forces in Algeria.⁷⁶ The second phase of the war, from the fall of 1955 to late 1958, was punctuated by a sharp escalation in the level of violence on both sides. Early in 1956, after rioting by impatient *colons*, the French government responded by tripling the number of forces in Algeria. Arguably, the French army saw a high degree of tactical success during this phase as a result of three key events: the prosecution of a

Major Francois-Marie Gougeon, "The Challe Plan: Counter-insurgency Operations in Algeria 1954-62" (Master of Military Studies Thesis, USMC Staff College, 2005), 1; Reprinted in US Army Command and General Staff College, *I100 Book of Readings* (Fort Leavenworth, KS: USACGSC, 2005), I106RD-1. Algeria changed as such from military to civilian administration in 1870 and was then broken into three departments under the authority of *prefets* (in Algiers, Oran, and Constantine). These are similar to the 'states' within the United States.

⁷³ Jonathan M. House, "Overview of the Algerian Conflict", *I100 Book of Readings* (Fort Leavenworth, KS: USACGSC, 2005), I106RA1-1.

⁷⁴ Horne. Savage War. 99.

Peter D. Jackson, "French Ground Force Organizational Development for Counterrevolutionary Warfare between 1945 and 1962" (Masters of Military Art and Science, USACGSC, 2005), 2; Reprinted in US Army Command and General Staff College, *I100 Book of Readings* (Fort Leavenworth, KS: USACGSC, 2005), I106RB-2.

⁷⁶ Kelly, Lost Soldiers, 151.

yearlong battle with insurgents during the 'Battle of Algiers,' the establishment of the territorial military system at the local level, and the sealing of the borders along the 'Morice' line. Despite the tactical victories that occurred during this phase, the domestic political situation in France continued to deteriorate, and support for the war waned. Dreading French capitulation to the rebels, the *colons* and many professional soldiers formed a Committee of Public Safety in an overt attempt to influence French politics. Widespread demonstrations followed, along with a coup attempt on the island of Corsica by French special operations forces.

The third phase of the war began with the controversial installation of Charles de Gaulle as President of the Fifth French Republic in December of 1958. The French armed forces supported de Gaulle's rise to power with the understanding that as President, de Gaulle would continue to pursue a policy of *Algeria Française*. French combat effectiveness continued to increase during this phase, as senior commanders applied successful counterinsurgency techniques on a large scale across all of Algeria. In a series of nine sequential operations in 1959, French forces swept from west to east across Algeria, eliminating most major pockets of resistance. The phase ended with another aborted coup attempt in April of 1961, when senior military leaders conspired to remove de Gaulle from office. Having lost near complete confidence in his military leadership, and with no popular support remaining for continued bloodshed, de Gaulle began a series of peace negotiations during the war's final phase. On March 18, 1962, the two sides signed the Evian Accords and a cease-fire took effect the next day. Formal independence for Algeria was declared on July 3, 1962.

What began as a 'public order operation' had quickly spiraled into a full-scale war that France could not afford and did not want. In eight years of combat, the French Army suffered 85,000 casualties – 18,000 dead and 65,000 wounded. Between 1956 and 1960, more than three-fifths of the French Army was stationed in Algeria and placed a tremendous strain on a force already facing the 'imminent' threat of the Warsaw Pact in Eastern Europe. 77

French Political Effectiveness

The political effectiveness of military forces in a Long War is driven by appropriate access to its nation's physical and moral resources. These resources must be suitable for a conflict that demands endurance, legitimacy, and deterrence. With the benefit of hindsight, it is obvious that from the beginning of the Algerian War, the French military was politically ineffective. France could not, or did not choose to, apply the necessary resources to effectively accomplish the tasks necessary to succeed. In 1954, France remained physically and psychologically exhausted. Her economy was still in shambles, her political life tumultuous, and her population divided over the future relationship between the French

⁷⁷ Horne, Savage War, 169.

Republic and her prior colonial possessions. These conditions helped set the stage for the ultimate failure of French policy towards Algeria and the deterioration of the overall effectiveness of the French military.

France's principal domestic distraction was her economy. The economic engine of France – her industrial capacity - remained badly damaged. Wartime destruction was so complete that French defense industries were not truly productive until the mid-1950s. The financial outlook in France in the mid-1950's remained grim. Inflation ran wild resulting in a regular devaluation of the franc. In 1951, the cost of living alone jumped 39%. By 1953, prices stood at 23 times their pre-war levels. As a basis of comparison, in 1929, US industrial production had doubled; Britain's had increased 54%; war shattered Germany's was up 53%. But France's lagged at just 8%. Further adding to their economic woes, a series of labor strikes in 1955 paralyzed virtually all governmental services from postal delivery to transportation services. The war did nothing to improve the economic or fiscal health of France. In 1957, the national deficit tripled its 1955 level and the government was forced to introduce such unpopular measures as gas and postage taxes, and a 30% surtax on dividends. Policies like these caused the downfall of several French governments during the tumultuous decade. While an inability to deal with financial and economic problems may have been the proximate cause for the collapse of these governments, the dominant factor always remained Algeria. Socialist President Guy Mellot predicted in early 1957 that Algeria would be lost "not from a collapse on the military front, but on the interior front of France."

Political turmoil also helps explain why the French military was ill-prepared to fight another protracted conflict. Between 1945 and 1962, while the French military was engaged in two major wars, more than two dozen governments occupied Paris. Coherent policy direction and access to predictable resources were lacking. Author George Kelly sums up the frustrations of senior military leaders, "[The military] construed itself as being under orders to accomplish a mission that the regime was progressively thwarting through vacillation, ignorance and duplicity. Since 1947 the French army had been doggedly engaged in wars in which it had neither allies nor the active sympathy of many of the French people. The government had given orders to fight these wars, and presumably to win them; what the government had not furnished were the means or the compatible political direction."

⁷⁸ Hood, "Bitter Victory," in *Military Effectiveness*, 230.

⁷⁹ Horne, *Savage War*, 66. The great economic leap enabled by the Marshall Plan did not occur until much until the 1960s.

⁸⁰ Ibid., 239.

⁸¹ Ibid., 239.

⁸² Kelly, Lost Soldiers, 8.

As the French Army escalated force levels in Algeria, the French government had trouble furnishing the service with adequate manpower. The French military was a composite force made up of both professional (volunteer) and conscripted troops. Though there was no shortage of troops for elite units like the paratroop regiments, recruiting for other units had dropped off significantly after the debacle at Dien Bien Phu. ⁸³ In 1956, this personnel shortfall led to an unpopular policy decision concerning the use of reservist and conscripted troops. In order to meet the demands of a troop 'surge,' President Mollet lengthened the conscripts' term of service from 18 to 27 months and recalled a whole class of reservists for use in Algeria. ⁸⁴ The decision represented a radical departure from Mollet's previous statements and met with widespread popular resentment, particularly among young conscripts. ⁸⁵ In the short term, the controversial decision proved useful in providing the military with temporary troop strength, but the long-term effect on popular support would prove disastrous. Declining birthrates also contributed to France's acute manpower shortage. In 1958, De Gaulle's Prime Minister, Michel Debre, disclosed to senior military leaders that Algeria needed quick resolution because France was about to experience a manpower shortfall as the reduced birth rates during German occupation were reflected in smaller age groups of military conscripts. ⁸⁶

The erosion of public support was a key factor in the decline of French military effectiveness. By 1960, France was war weary. A long-simmering antiwar movement emerged at the forefront of the public consciousness creating a cohesive, political force. In an effort to prevent another crippling general strike by trade and labor unions, de Gaulle's government banned antiwar demonstrations, a move that served to further increase skepticism and anger. Popular culture everywhere seemed to adopt a more liberal and anti-Gaullist view. In addition to several fashionable authors and playwrights subverting the French government through their respective works, a group of influential celebrities and intellectuals issued the "Manifesto of the 121" that declared the right of insubordination to soldiers fighting in Algeria. Many of their concerns were focused on the morality of French policies in Algeria. The tacit authorization of torture as means to acquire intelligence had been debated by the French public since the Battle of Algiers in 1957. By 1960, the issue was rekindled when the government renewed the executions of convicted terrorists at the request of the *pied noirs*. Recently returned servicemen added to the furor by testifying to the brutality of the conflict and disclosing several atrocities that had taken place on both sides, including the recent torture of a little girl. In October of 1960 several

⁸³ Horne, Savage War, 169.

⁸⁴ This policy was legally justifiable because Algeria was considered a part of France. This also meant that the French Army would be fighting a 'law enforcement operation', rather than a war. The French government did not have the ability to excise this option in Indochina because it did not hold the same status in the French Constitution.

⁸⁵ Horne, Savage War, 151.

⁸⁶ House, "Algerian Conflict," in *I100*, 5.

hundred thousand demonstrators crowded the streets of Paris.⁸⁷ De Gaulle, who by this time was already looking for a 'peace with honor,' knew that the battle for the hearts and minds of metropolitan France was lost. No further resources could be pumped into winning the war in Algeria.

Another contributing factor to the loss of political effectiveness of the French military was the competing priorities of the French government. While the French Army, in particular, was focused on winning an irregular war in Algeria, de Gaulle and his government were already committing resources to transform the military in a different direction. "France is once more becoming a world power," General de Gaulle declared to a group of assembled officers on March 4, 1960. ⁸⁸ Many officers subsequently refused to see how France could recapture her position as a world power by systematically withdrawing from historical positions of strength. But for de Gaulle, the retrenchment and re-equipment, and the restaging of nuclearized forces from the critical base of Western Europe were vital. Algeria, in his view, was a wasteful peripheral war that had to be liquidated. ⁸⁹ He declared, "As soon as the Algerian war is ended, I shall form five atomic divisions."

French Strategic Effectiveness

Strategic formulations in this kind of protracted conflict require consistency and coherence, as well as recognition and support by international partners. Strategic effectiveness in a Long War depends on a healthy, reciprocal dialogue between civilian and military leaders. France was handicapped from the beginning of the Algerian War by extremely poor civil-military relations as a result of lingering resentment from the Second World War and Indochina. Fluctuations in Algerian policy over the course of weak, successive French governments served to frustrate military leadership. As the Algerian War wore on, senior military leaders felt the need to mount aggressive political campaigns and subvert their civilian counterparts to ensure the viability of their mission. Policymakers in Paris were alarmed by the inability to establish firm civilian control of the military. The issue of civil-military relations underscored all of the other factors that contributed to French strategic ineffectiveness.

Strategic endurance, one of the keys to success in a Long War, was jeopardized by the inability of the French government to apply a patient, long-term strategy to the Algerian problem. The ever-changing nature of the French

⁸⁷ Horne, Savage War, 415

⁸⁸ Kelly, Lost Soldiers, 374.

⁸⁹ Ibid., 375.

⁹⁰ Horne, Savage War, 312.

political landscape caused the strategic aims of France to shift from year to year. These can be broadly traced through the course of the war. In 1954, the primary strategic objective was to maintain the unity and integrity of the French Republic and the principle of *Algeria Française*. In 1957, the objective was narrowed to merely 'containing' the war. Then, in 1958, France's aim was refocused on securing energy supplies through a newly constructed Saharan oil pipeline. By 1960, de Gaulle publicly endorsed the idea of Algerian self-determination and sought a peace that would reinforce only a special relationship with Algeria. One should not infer from this analysis that strategy should remain unchanging in the face of reality – only that strategic adjustments require the support of both policy designers and those who must carry out the directives. In this case, not only did the French Army fail to accept the changing strategic direction, but in many cases they actively worked to subvert it. Absent a unity of effort, any strategy will fail – the Algeria case is no exception.

The issue of strategic legitimacy is crucial to the conduct of a Long War, where ideology and political efforts often matter more than military operations. The internationalization of the conflict gradually served to undermine foreign support for French strategic aims in Algeria. Over time, the international community failed to rally to the French cause. The symbolic final straw came December 20, 1960, when the General Assembly of the United Nations adopted a resolution that recognized the right of the Algerian people to self-determination and independence. 92 The French had hoped that the outrages of terrorism early in the war by the FLN would produce a revulsion and outcry in the international community. But the eventual reaction would perversely end up as one of irritation against France as being responsible for the war in which such horrors could take place. 93 There were several contributing factors to this phenomenon. First, moral gualms with the use of torture, resettlement operations, and psychological warfare proved just as troubling to the free world as they were at home in France. The Catholic Church became a particularly vocal and influential critic. Second, several incidents reinforced a perception that France was prone to intentionally violate international law when doing so served her interests. On October 22, 1956, a Tunisian airliner bound for Morocco was forced to land on Algerian soil while FLN leader, Ben Bella, was detained. Another episode involved a retaliatory air strike on the Tunisian border town of Sakiet on February 8, 1958. 94 This provoked more outrage and raised questions about whether France would respect the sovereignty of her North African neighbors. Lastly, relations between France and the other great powers began to falter over other international developments and this animosity spilled over into their willingness to tolerate

⁹¹ Ibid., 241. The Suez Crisis of 1956 demonstrated the vulnerability of Middle Eastern oil supplies. The Saharan pipeline was a project designed to help reach French energy independence.

⁹² Ibid., 465.

⁹³ Ibid., 246.

⁹⁴ Ibid., 159.

French activities in Algeria. The Suez Crisis of 1956 demonstrated the rising influence of US foreign policy on the world stage. The refusal of the US to support a decisive conclusion to the conflict infuriated the French and led to considerable tension. The question of international legitimacy was finally settled by the election of President John Kennedy in 1960. Kennedy immediately reduced US military aid to France and placed considerable pressure on de Gaulle to end the conflict.

French Operational Effectiveness

French operational effectiveness peaked in Algeria between 1956 and 1959. This was largely the result of the doctrinal coherence that was born of the French Army's experiences in Indochina. The concept of *guerre révolutionnaire* (revolutionary warfare) was initially formulated by officers whose experiences led them to seek new ways of countering anticolonial insurrections. The pioneers of the doctrine included General Lionel-Max Chassin, Colonel Charles Lacheroy, General J.M. Nemo, and Colonel Roger Trinquier. Guerre révolutionnaire embraced a view that revolutionary wars are fought for the allegiance of the people, and the primary weapons that should be employed are social, political, and psychological rather than military. Though it took until late 1956 for the techniques and principles to fully permeate the French Army, the approach maximized the operational endurance of French forces in Algeria. Most of the operational successes between 1956 and 1959 were directly attributable to their new doctrine.

Two primary tenets of the French counterinsurgency doctrine were pacification and subversion. 'Pacification' involved physical methods that placed the population under the control of French forces, as well as specific actions taken to destroy the network of insurgents. Pacification called for the implementation of a unique force structure and network of territorial control, a system called *quadrillage* ('squaring' or 'gridding'). Semi-permanent garrisons of French troops within local communities were responsible for providing local security, police work, and intelligence. These forces were in turn backed by mobile forces that could respond in a crisis. Elite paratroop units, marines, mechanized forces, and helicopter wings comprised another formation of 'Intervention' troops that were used only for large combat operations as

⁹⁵ France saw Egypt in 1956 as a safe haven and base of support for the FLN. French operations in the Suez, therefore, were largely tied to their ongoing war in Algeria. This motivation did not extend to their British and Israeli allies.

⁹⁶ Peter Paret, French Revolutionary Warfare from Indo-China to Algeria: The Analysis of a Political and Military Doctrine (New York, Praeger, 1964), 7.

⁹⁷ Paret, *French Revolutionary Warfare*, 36. A former Chief of Staff of the army explains the theory behind the network – "*Quadrillage* attempted to put French troops – to the last man – to the last private, in direct contact with the Moslems, turning each into a kind of ambassador to the Moslem population."

necessary. By 1959, there were nearly 300,000 French troops committed to territorial defense and 30,000 committed to intervention. 98

The second tenet of *guerre révolutionnaire*, 'Subversion,' constituted the psychological component of the doctrine and came as a response to the ideological character of the insurrection. Subversion, was intended to articulate a counter-ideology to revolutionary forces and to "fence-sitters" – those who hadn't made up their mind about whom to support. Under the auspices of the Ministry of National Defense, the *Section d'Action Psychologique et d'Information* (Psychological and Information Action Service, SAPI) was established to translate the government's policy into a broad program of psychological action in Algeria. ⁹⁹ Psychological warfare personnel were distributed down to battalion level and sometimes below. These officers were focused on winning the "war for the crowd" and the "war in the crowd," two themes in French military writing. ¹⁰⁰

There is a strong civic component to *guerre révolutionnaire* that is focused on gaining the trust and support of the local populace. To that end, two civil affairs organizations, the Section Administrative Spéciale (Special Administrative Sections, SAS) and the Section Administrative Urbaines (Urban Administrative Section, SAU), were developed to fill gaps in local government and act as civic action groups within each community. From 1955 until the end of the war, the SAS and the SAU worked with both the French civilian government and the regional military commanders to identify the needs of the population. They were extremely effective both in their primary role of facilitating local governance and in a secondary effort as intelligence collectors. Always underfunded and undermanned, these unconventional troops met with considerable resistance from their conventional counterparts because they answered outside of the normal chain of command. Despite this friction, the special attention given civil affairs undoubtedly freed up troops that would otherwise have been used for security operations, and increased the operational endurance of French forces.

There were three very successful campaigns waged using the new French doctrine that are worthy of special mention: the 1957 Battle of Algiers, the 1958 defense of the 'Morice Line,' and a series of offensives under the 'Challe Plan' during 1958-1959. Each of these demonstrated the proficiency of the French military at counterinsurgency operations. By the end of 1959, the French Army had largely accomplished the task of achieving operational deterrence.

⁹⁸ Ibid, 36.

⁹⁹ Kelly, Lost Soldiers, 186.

Donn A. Starry, "La Guerre Revolutionnaire," *Military Review* 42, no. 2 (February 1967): 61; Reprinted in US Army Command and General Staff College, *I100 Book of Readings* (Fort Leavenworth, KS: USACGSC, 2005), I106RC-2.

¹⁰¹ Paret, French Revolutionary Warfare, 50.

ALN forces in sanctuaries simply sat and waited for a negotiated settlement, and the FLN was reduced to operating from its government exile in Tunisia. 102

Despite its operational successes, the French adherence to the doctrine of *guerre révolutionnaire* saw the employment of some unsavory techniques which had lasting consequences. First, massive involuntary population resettlement operations between 1955 and 1960 relocated between a fifth and a quarter of the Moslem population of Algeria. The goal was to secure the population and deny the insurgents the materiel and moral support of the people. ¹⁰³ Though proponents would argue that the standard of living for Algerians was universally improved by the relocation effort, the results were artificial and distressing in a country that was already suffering upheaval touching on all aspects of traditional life. Second, a program of internment and re-education was established at 10 camps across Algeria for the thousands of Algerians rounded up in routine 'sweeps.' While both of these techniques offered some immediate military advantages, the disruptive effect that they had on the civilian population may have done more long-term damage than good.

Another impediment to long-term operational effectiveness came with the interruption of France's military transformation. Kelly observed, "France had been modernizing its forces in conjunction with NATO plans, but this rapid conversion of machines and armament had to be halted in the immediate interests of fighting an irregular war. As time passed, practice won out over theory, and the exigencies of the Algerian fighting came increasingly to regulate the form of the French division and retard its projected modernization. One model division was "de-adapted," and the slowing of the reconversion itself involved great cost." By slowing the pace of the military's planned transformation, the French military degraded long-term effectiveness for the benefit of short term results.

French Tactical Effectiveness

By almost any standard, the tactical performance of the French military was particularly impressive from mid-1957 until the end of the war. But combat operations for the French Army did not begin well. It started the war by repeating the early errors of the Indochina war - hitting back with tanks and heavy equipment in a style reminiscent of the

¹⁰² Jackson, "French Ground Force Development," *1100*, I106RB-2.

¹⁰³ Paret, French Revolutionary Warfare, 42. GEN Challe, Commander of French forces in Algeria at the time – "The theory, the famous theory of water and fish of Mao Tse-tung, which has achieved much, is still very simple and very true: If you withdraw the water, that is to say, the support of the population, fish can no longer live. It's simple, I know, but in war only the simple things can be achieved."

¹⁰⁴ Kelly, Lost Soldiers, 183.

Second World War. With the arrival of President Mollett's reservists and national servicemen in 1956, a steady flow of US helicopters and modern equipment, new leaders, new units, and new tactics, there was a dramatic improvement in striking power and overall performance. Security operations were interrupted by the withdrawal of elite paratrooper units for use in the Suez Crisis, but the situation improved upon their return early in 1957.

French forces began to display remarkable tactical endurance while fighting the Battle of Algiers in 1957. There are several reasons for the notable rise in their performance. Units were able to maintain high levels of combat effectiveness over long periods of time because they had deep reserves of experienced leaders from the small-unit level to the highest ranks. The professional core of the French Army had been at war a long time, and few armies possessed a generation of officers who had fought as often. Out to simply, the longer they remained in combat the better they got.

Other qualitative improvements at the tactical level played a role as well. The size of infantry battalions had increased since Indochina. This minor change in force structure gave the *quadrillage* system a sufficient number of troops to work. In addition, with an influx of US military equipment, units now had a greater degree of tactical mobility and firepower. The French Army commanders had many options for the deployment of their mobile forces. Fielding new American and French helicopters, the French could conduct air assaults of up to two battalions at a time in most areas of Algeria as well as conduct parachute insertions or motorized assault. Ultimately, the integration of robust territorial troops with highly mobile striking forces proved to be a decisive advantage over the ALN.

The intelligence apparatus of the French Army in Algeria deserves special attention. The relative inability of the ALN to meaningfully engage French forces after 1959 demonstrated the French success in achieving tactical deterrence. One of the principal reasons for this was the high attrition rate for ALN leaders. Lacking coherence of command structure, the ALN proved inadequate. The intelligence network that the French developed over the course of the war to target the enemy's commander was impressive, but the techniques employed to exploit their sources would prove to be an Achilles' heel. The widespread use of torture by French units has already been identified as a major factor in the erosion of public support from the war effort. Despite its obvious cost, many inside the French military – and in the French government – thought that the tactic was justifiable. An anonymous letter circulated among officers of the 10th Paras argued, "Between two evils – it is necessary to choose the least. So that innocent persons should not be unjustly put to

¹⁰⁵ Horne, Savage War, 165.

¹⁰⁶ Jackson, "French Ground Force Development," *I100*, I106RB-6.

¹⁰⁷ Ibid, 8.

¹⁰⁸ Kelly, Lost Soldiers, 171.

death...the criminals must be punished..." History would prove the short-sightedness of this attitude. Moreover, the torture issue demonstrates the paradox of using morally questionable tactics to build tactical effectiveness, a move that almost certainly jeopardizes strategic effectiveness in the long run.

Summary

It is not surprising that some historians have labeled the Algerian War as a 'conquest without victory.' After all, didn't the French military achieve some resounding tactical and operational successes? Doesn't battlefield performance count for something? It may, but in a Long War it does not matter as much as one might think. An analysis of the military effectiveness of French forces in their 'Long War' in Algeria suggests that their tactical and operational prowess could never have made up for their political and strategic shortcomings. Given the military's stubborn, passionate loyalty to Algeria Française, the fractured state of civil-military relations, and lack of popular support, the war in Algeria was doomed to failure.

France reached its peak military commitment to the Algerian War in the summer of 1959. Stationed in Algeria at the time were nearly a half million French soldiers and security officers – nearly three-fifths of her entire Army. Experienced French forces scored great successes at the tactical and operational levels, but significant problems plagued the war effort. There was no evidence of a broad, inter-departmental effort to win in Algeria from the government of Charles de Gaulle. A budget crisis was looming, and the manpower reserves of the country were drying up. Furthermore, the French public did not share a common understanding of the costs of failure with the French army. In their eyes the costs far outweighed the benefits. The simple fact was that France had competing priorities. The leftover national resources allocated to winning the war were simply not sufficient and it didn't have the endurance to continue.

The strategic effectiveness of the French was hampered by the lack of a working relationship with most of the 20-odd governments that reigned over the course of the war. Three military coup attempts and countless efforts by the senior military officers to subvert civilian control left a bitter taste in the mouths of policymakers in Paris. For the most part, the civilian governments would repudiate military advice. In addition, the legitimacy of French strategic aims was called into question by foreign powers while a host of unpopular and, arguably, immoral techniques practiced by the French Army served to evoke even more hostility. Rather than changing strategic direction in the face of mounting evidence of failure, the military retrenched and pursued a course of action that eventually brought it closer to sedition than victory.

109 Kelly, Lost Soldiers, 200.

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On the whole, it is fair to say that at the tactical level the French military waged their counterinsurgency campaign as effectively as they could. But as strategist Colin Gray warns, "Unfortunately for them, they failed to secure a firm intellectual grasp of the truth that war is a political act and that people are political animals. Tactical competence does not magically enable the counterinsurgent to manufacture an adequate political story. Modern war, French-style, could work tactically and operationally in Algeria, but never strategically. The reason was that the French military effort, no matter how tactically excellent and intellectually sophisticated, was always politically hollow."

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¹¹⁰ Colin S. Gray, Irregular Enemies and the Essence of Strategy: Can the American Way of War Adapt (Carlisle, PA: Strategic Studies Institute, 2006), 21-22.

US MILITARY EFFECTIVENESS IN THE LONG WAR

There are several disturbing parallels between the experience of the French military in Algeria and ongoing US military efforts in the Long War. When one considers some of the symptoms of French ineffectiveness during the Algerian war – unpopular reservist call-ups and extensions, material and personnel shortages, public outrage over torture and internment policies, a popular anti-war movement, and divided government – it does not take much imagination to draw comparisons to the situation faced by the US military today. While one must avoid the temptation to use a single historical case study as a source of ready-made lessons, there appear to be several valuable insights about military effectiveness in a Long War that should not be ignored.¹¹¹

In the sixth year of combat since 9/11, the US military finds itself approaching a precarious position with regard to military effectiveness. Though the conflict has been waged at a fairly low level, it has still managed to place a huge stress on the US military. There are several reasons to call into question the health of the process that converts national strategic resources into fighting power.

Even a cursory assessment of US military effectiveness in the Long War must first address the emotional issue of US involvement in the Iraq War. The costs of the endeavor have been high: over 3300 soldiers have lost their lives and 500 billion dollars have been spent. While defenders of the Iraq War have lobbied that Iraq is a 'central front' in the war on terror, critics maintain that the war was a strategic blunder that does not belong in the same category as more 'legitimate' operations like Afghanistan. From the perspective of military effectiveness, the distinction is largely academic. From the standpoint of this analysis, the Iraq War must be included in any meaningful calculation of US military effectiveness in the Long War. Like it or not, it has become part of the global, strategic context in which the Long War is being fought. Military effectiveness is a dynamic process; performance in the Iraq War will have grave implications on the efficacy of the US military in the coming years whether or not one believes Iraq represents a legitimate campaign of the Long War.

Jon Sumida, "Pitfalls and Prospects: The misuses and Uses of Military History and Classical Military Theory in the Transformation Era," in *Rethinking the Principles of War* (Annapolis, MD: Naval Institute Press, 2005), 17.

Matt Crenson, "Costliness of the War is Subject to Debate," Boston Globe, 17 March 2007, p. 1. \$500 billion is more than the cost of the entire Korean War and nearly as much as 12 years in Vietnam, adjusting for inflation.

US Political Effectiveness

Assessing political effectiveness means examining whether the military has appropriate access to the nation's physical, financial, and moral resources. Are these resources sufficient to sustaining military forces during a protracted conflict? Will the public tolerate costly investments of the nation's blood and treasure into a war effort over an extended period of time? Is there a coordinated, inter-governmental effort that properly distributes assets to support wartime requirements? Does the American public demonstrate the resolve to win?

To prevail in the Long War, the US military must have access to money and manpower. The defense budget can be an important yardstick of political effectiveness and may serve as a leading indicator of the military's level of access to financial resources. Budgetary trends over time can demonstrate the long-term commitment of a nation to its military capabilities, as well as highlight potential problem areas.

With a gross domestic product (GDP) in excess of \$13 trillion, a population over 300 million, and the largest military-industrial base in the world, the United States has ample capacity to wage a protracted conflict if it so chooses. But national wealth, a large populace, and production capability do not automatically imply military effectiveness. An effective military must identify and communicate their requirements, and have a process through which the government is willing to commit necessary requested resources.

The US federal budgeting process is massive and complex and authorizes spending on an extraordinary scale. Last year's budget, FY07, allocated \$2.7 trillion in funding. At \$466 billion, the defense budget's share represented more than 17% of the total – second only to Social Security. But for the last several years, wartime spending requirements have far exceeded initial budget allocations and forced the Congressional appropriation of 'supplemental' funding to continue the war effort. As a result of a complicated accounting procedure that attempts to distinguish 'regular' funding from 'wartime operations' funding, the "true" cost of the Long War on defense spending has been difficult to measure. In an effort to promote transparency, the FY08 Defense budget request was coupled with an FY08 wartime spending supplemental and sent to Congress in February 2007. The combined budget requests surpassed \$712 billion – a number large enough to generate sticker shock in Congress.

¹¹³ The use of 'supplemental' appropriations by Congress to fund war efforts is not new.
Congress has authorized funding to cover unanticipated wartime expenses in every major conflict since WWII.

House Appropriations Subcommittee on Defense, televised hearing, CSPAN, 29 March 2007. Testimony provided by Defense Secretary Robert Gates and Chairman of the Joint Chiefs General Peter Pace.

Many defense advocates, including the Secretary of Defense, contend that despite the huge dollar amount, the defense budget is actually proportionally low by historical standards. During WWII the defense budget represented 38% of the GDP; during Korea, 14%; Vietnam, 9.8%. The defense budget in FY07 represented only 3.8% of GDP, having dipped as low as 3% from 1999 to 2001. Proponents like the former Chief of Staff of the Army, General (Retired) Peter Schoomaker, maintain that increasing the proportion of the defense budget is not a matter of affordability, but of maintaining the right national priorities in a crisis. 117

Using historic GDP figures to rationalize increases in defense spending, however, may ignore current budgetary realities. Gordon Adams, a national security policy expert who specializes in resource planning, argues that rising defense spending foreshadows a larger problem. The manner in which certain government entitlement programs are protected may imperil large increases in defense spending. His analysis focused on the difficult budgetary tradeoffs as a consequence of increased defense spending. He points out that, "56.2% of discretionary spending in FY06 was committed to what is called 'security spending': defense, Function 150 (international programs and activities), and government-wide homeland security. By FY 2008, the security share rises to nearly 60%. Continued upward pressure for these levels of security spending, driven largely by defense, will continue to put downward pressure on non-defense discretionary resources." In other words, the government will be forced to make hard choices about de-funding competing priorities like education and health programs for the sake of defense.

Federal spending is much less flexible today than it was during WWII, Korea, and Vietnam. Social programs like Social Security, Medicare, Medicaid, and Welfare continue to expand, now accounting for about 60% of federal

¹¹⁵ US, Department of the Army, *The Army Posture Statement* (Washington, D.C., 2006),

Mark Thompson, "Broken Down: What the war in Iraq has done to America's Army – and how to fix it," *TIME*, 16 April 2007, 31. See also William R. Hawkins, "Protracted War: The Real Revolution in Military Affairs," *ARMY* 56, no. 11 (November 2006): 12. Hawkins contends that "Defense spending has been rising since 2001 but is inadequate to expand forces levels or even maintain them. Its 2005 level of 4.3 % of GDP was the highest since 1994...Today's core defense effort is still well below the average of the 5.6 % of GDP for the 1975-1994 period. Indeed at no time during that 20 year span was defense spending as a share of GDP as low as it is today."

¹¹⁷ House Armed Services Committee, televised hearing, CSPAN, 23 January 2007.

¹¹⁸ Congress, Senate, Committee on the Budget, *Budgeting for Iraq and the GWOT: Testimony before the Committee on the Budget*, 110th Cong., 1st sess., 06 February 2007, 3.

spending.¹¹⁹ As a result of this growth, the remaining portion of the budget, discretionary spending, is more sensitive to fluctuations. Even marginal increases in defense spending will have a disproportionately negative impact on other discretionary programs. This raises the possibility that a threshold of public tolerance may not be far beyond the current fiscal allocation.

Another potential indicator of the military's political effectiveness lies in its access to a sufficient quality and quantity of manpower. The US military, the Army in particular, has faced some alarming personnel problems in the last few years. The all-volunteer US military, the centerpiece of the national defense since 1973, may be facing a significant threat to its existence. Four years of combat in an unpopular war, an extremely high operating tempo, and strong competition from the private sector have placed a strain on service members and posed challenges to recruiting and retention efforts.

The effect of these problems on the US Army has been particularly well documented and may be an indicator of more problems down the road for all the services. After missing its recruiting target in 2005 for the first time in years, the Army met its annual goal in 2006 by bringing in 80,000 soldiers. But this effort came with a hefty price tag. The Army paid about \$300 million more on recruiting compared with the year before. The service spent \$18,327 per accession in FY06 –more than double the \$7,000 it spent 20 years ago. In the next few years, the price is likely to continue to climb. The Army projects it will pay \$18,842 per recruit during FY08. Retaining experienced personnel has proven to be an even more costly venture. The Army spent about \$735 million on retention bonuses in 2006 to keep troops in the service, up from about \$85 million in 2003. In total, it spent over \$1 billion last year in bonuses to attract and keep soldiers in the service, more than three times the total amount of bonuses paid before the Iraq war began.

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Discretionary spending refers to spending set by annual appropriation levels made by decision of Congress. The other major category of spending is mandatory spending which includes entitlement programs like MEDICARE, MEDICAID, and Social Security. Spending levels for these programs enjoy permanent legal protection and are dictated by the number of people who sign up, rather than by Congress.

Greg Jaffe, "Despite Its \$168 Billion Budget, the Army Faces a Cash Crunch," Wall Street Journal (New York), 11 December 2006, sec. A, p. 4.

Gordon Lubold, "To Keep Recruiting Up, US Military Spends More," *Christian Science Monitor*, 12 April 2007, 1.

Greg Jaffe, "Army will study accelerating growth to ease troop strain," *Wall Street Journal* (New York), 16 April 2007, sec. A, p. 6.

Tom Vanden Brook, "Army Pays \$1 Billion to Recruit and Retain Soldiers," *USA Today*, 12 April 2007, 8.

These challenges of recruiting and retention are magnified by the need to grow the end strength of the force.

This year the Army was authorized to implement a five-year plan to increase its ranks from its current troop strength of 507,000 to 547,000 soldiers by 2012, recruiting an additional 7,000 servicemen a year. The Army estimates that the total cost of this growth will be \$70 billion. In 2001, it would have cost the service about \$700 million to add 10,000 members.

But, this year it will take \$1.2 billion to recruit, train, and equip the same number – in part because of increased enlistment bonuses and other incentives.

There have been second-order effects to the military's manpower problems. There are indications that the military has been forced to recruit less qualified people. While the quality of the force is still considered good, there are troubling signs of deterioration. Just 81% of Army recruits had high school diplomas in 2006, a sharp drop from 94% in 2003. Similarly, the Army granted 8,500 waivers for felonies and other personal shortcomings in 2006, more than triple the 2,260 granted ten years ago. And in a surprising policy shift in the past year and a half, the maximum enlistment age was raised from 34 to 40, and then to 42. At least anecdotal evidence suggests that the Army has been forced to lower its standards. In May 2005, 18% of recruits were asked to leave Initial Entry Training. In February 2007, only 6% failed to make it through.

Another effect of the manpower problems is that the military has been forced to adopt strict policies to keep its ranks filled. A controversial 'stop-loss' program has temporarily kept more than 70,000 soldiers in uniform beyond their retirement or end of enlistment obligation since 2001. Though the policy was authorized by Congress after the Vietnam War and is articulated clearly in Paragraph 9c of each enlistment contract, critics have nonetheless decried this unpopular practice a "backdoor draft."

US Strategic Effectiveness

The viability and appropriateness of US strategy in the Long War is difficult to evaluate in the absence of an outcome. Is the US pursuing the right strategy? Despite the best efforts of prognosticators, only time will tell. But

Ann Scott Tyson, "General Says Army will need to grow," *Washington Post*, 15 December 2006, sec. A, p.1.

¹²⁵ Thompson, "Broken Down," 16 April 2007, 33.

Greg Jaffe, "Despite Its \$168 Billion Budget, the Army Faces a Cash Crunch," Wall Street Journal (New York), 11 December 2006, sec. A, p. 4.

¹²⁷ Brian Mockenhaupt, "The Army We Have," *The Atlantic Monthly*, June 2007, 12.

¹²⁸ Thompson, "Broken Down," 16 April 2007, 33.

examining the two essential ingredients of strategic effectiveness in a Long War – strategic endurance and strategic legitimacy – is a prerequisite to administering any intelligent judgment. Without these two qualities, any US strategy that the US adopts in the Long War is likely to be problematic.

Strategic endurance requires consistency, coherence, and patience from policymakers and the general public. A successful strategy during a protracted conflict is one that pursues a comprehensive approach. It draws together all the resources of the US government and has enough public support to endure from election to election and from administration to administration. It must include an effective national security framework that can coordinate the actions of disparate agencies. Another aspect of endurance has military implications. The armed forces must be suitably employed and equipped for their protracted mission. The size and force structure of the military has to be sufficient to achieve the goals established by the government.

The enormity of the US government and the nature of American representative democracy inherently impede US strategic endurance. The massive size and breadth of the US federal bureaucracy challenges unity of effort among government agencies even under ideal circumstances. Complicated department structures, organizational rivalries, and innate institutional parochialism are natural impediments to any unified, cross-governmental efforts. The recurring election cycle perpetually shifts control of the executive and legislative branches. This adds a level of unpredictability that can thwart long-range strategic planning. The tension created by these two features generates strategic friction, but these inconveniences are some of the necessary costs of running a modern democracy.

Since September 11, considerable energy has been expended trying to reduce bureaucratic obstacles and achieve governmental efficiencies in support of the war effort. The national security apparatus has undergone several evolutionary changes. The Homeland Security Act of 2002 initiated the first significant realignment of national security organizations in 50 years. But despite the restructuring, articulating strategy and reducing the duplication of effort among competing agencies and departments proved exceedingly difficult. The classified National Implementation Plan (NIP), drafted by Presidential directive in 2006, was intended to eliminate overlap and synchronize the participation of all arms of government in the Long War. Using the existing national security architecture, it sets government-wide goals and assigns responsibility for achieving them to specific departments and agencies. The plan represents an attempt to shift the focus of the nation's counterterrorism strategy from military to diplomatic efforts. Within half a dozen broad objectives, the document designates lead and subordinate agencies to carry out more than 500 discrete counterterrorism tasks, among

129 David Ignatius, "Abizaid's Long View," *Washington Post*, 16 March 2007, sec. A, p. 21. Ignatius' interview with General (Ret.) John Abizaid covers his thoughts on the necessities of the Long War. He highlights two keys to eventual victory - an enduring, comprehensive strategy

and a new national security structure to implement the strategy.

them vanquishing al-Qaeda, protecting the homeland, recruiting allies, training experts in other languages and cultures, and understanding and influencing the Islamic psyche. 130

It is too soon to know whether the NIP will have the synchronizing effect that it was designed to promote. But critics contend that, regardless, it is only treating the symptoms of the underlying disease –US national security architecture is poorly configured to handle the demands of the Long War. One criticism is that the military is shouldering too much of the burden of the war effort. The existing national security institution is predisposed to solve problems using military power. But this solves only a fraction of the underlying issues. The rest of the effort needs to be diplomatic, economic, and political. Another criticism is that the national security structure is cumbersome and produces unnecessary confusion. The maze of national strategic documents illustrates the difficulty of articulating a coherent strategy to an organization as large as the US defense establishment. If one were to follow the trail of military-strategic guidance from the President to his Combatant Commanders, the result would make for a long day of reading. It would begin with the National Security Strategy, followed by the National Strategy for Counter-Terrorism, the National Implementation Plan, the National Defense Strategy, the National Military Strategy, the National Military Strategic Plan for the War on Terrorism, followed by the SOCOM Global Campaign for War on Terror (WOT), and finally culminating with theater specific campaign plans.

The size and structure of the armed forces are other important indicators of strategic endurance. Adjustments to the size of US forces are made through analysis of strategic objectives and potential military threats outlined in the QDR and the National Security Strategy. But, the Army and Marine Corps, facing the lion's share of ground combat in Iraq and Afghanistan, are stretched thin trying to keep up with the pace of operations. They are drawing from a historically small pool of active members, the lingering result of a dramatic post-Cold War downsizing. The active Army shrank from 780,000 members in 1989 to fewer than 500,000 in 1996. ¹³² In recent testimony before a Congressional subcommittee, the former Chief of Staff of the Army, (now retired) General Peter Schoomaker raised concerns about what he calls the 'strategic depth' of the Army. "The current operating tempo exceeds what the QDR expected it should be," especially in terms of the size of the force it calls for. In a departure from his previous public statements, he

¹³⁰ Karen DeYoung, "A Fight Against Terrorism – and Disorganization," *Washington Post*, 09 August 2006, A-01.

¹³¹ Ignatius, "Abizaid," 16 March 2007. Facing a global communist adversary in 1947, the United States created institutions that could coordinate all the different strands of policy, and Abizaid argues that we need a 1947-style reform now. "There are too many bureaucratic impediments," he says. It's too hard, in his view, to balance elements that should be working together but are instead competing – State Department vs. Defense Department, legislative vs. executive, America vs. its allies.

¹³² Brian Mockenhaupt, "The Army We Have," *The Atlantic Monthly*, June 2007, 12.

recommended increasing the size of the active force to 565,000 troops, a number almost 20,000 more than the five year growth plan authorized by Congress earlier this year. He claims, "The active force is too small," and the Army's overall force structure is not balanced in effective proportions. Although 55 % of soldiers belong to the National Guard or the reserve, the Defense Department dictates that reservists can be mobilized involuntarily only once, and for no more than 24 months. As a result, out of the total of 522,000 Army National Guard and reserve members, only about 90,000 are still available to be mobilized. "The Army is incapable of generating and sustaining the required forces to wage the global war on terror... without its components -- active, Guard and reserve -- surging together... At this pace, without recurrent access to the reserve components, through remobilization, we will break the active component," he said. 134

Legitimacy is the second essential element of strategic effectiveness in a Long War. Questions about strategic legitimacy are broadly concerned with whether the political and military objectives of a nation are considered legal and justifiable. The perception of legitimacy offers credibility that provides a foundation for popular support and international sanction, two crucial ingredients to a war effort that is prolonged and global.

Several significant issues have undermined the perception of legitimacy of US efforts in the Long War. The legal and political justifications for the invasion of Iraq remain under considerable scrutiny at home and abroad. The contentious legal arguments surrounding the limits of UN Resolution 1441 and the right of preemptive self-defense appear to be less important to the public than the failure to find weapons of mass destruction (WMD). Allegations of torture and abusive treatment towards prisoners at Abu Ghraib and at 'secret prisons' abroad have placed the US in a difficult moral position. Similarly, the status of detainees at Guantanamo and the suspension of the writ of habeas corpus have generated ethical concerns about the legal methods employed by the US government to prosecute the Long War.

Whether these controversies accurately depict US actions or not is irrelevant. The moral component in this type of conflict is strategically decisive, and each of these issues has taken a toll on US credibility and contributed to a decline in public support. Questions over the legitimacy of the Iraq War have made cooperation on other global issues more difficult and created divisions among traditional partners. It seems to have reinforced for the world an image of the US as the world's lone superpower that is willing to act unilaterally when its interests are served. The question of torture has been particularly damaging. Although "enhanced interrogation techniques" may bring about some short-term tactical and

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higher numbers for the active force. General (Retired) Gordon Sullivan, former Army Chief of Staff, advocates a number as high as 700,000.

¹³⁴ Thompson, "Broken Down," 16 April 2007, 33.

operational advantages, officially or unofficially condoning torture is a major strategic blunder. The disadvantages at the strategic level dwarf any short-term payoffs, regardless of technical legality. 135

US Operational Effectiveness

Operational effectiveness refers to the ability of a military to employ its forces to achieve strategic objectives as part of a military campaign. Military activities at the operational level include the deployment and arrangement of forces in theater and the execution of large scale operations. Analysis of operational effectiveness in a Long War is focused narrowly on traits like sustainability, adaptability, and doctrinal coherence. Is the military capable of meeting the demands of a protracted war? To what degree are military units capable of handling a rotation of forces? Are the doctrinal concepts suitable and effective? Do the demands of an enduring effort disrupt long-term transformation projects or the modernization of the force?

The US military's current operational capabilities were shaped by a paradigm shift that began in the 1990s. 'Transformation' offered a new concept of warfare that would exploit promising technologies in pervasive surveillance, precision weaponry, and networked communications. The underlying assumption was that these variables, plus a renewed emphasis on information operations, could enhance situational awareness, lift the 'fog of war,' and improve the efficiency and lethality of its forces. These goals would maximize US strengths and avoid a protracted war. Initial successes in Afghanistan and Iraq seemed to affirm the arguments of the concept's promoters. General (Retired) Tommy Franks reportedly remarked in his memoirs, "The days of half-million strong mobilizations were over." Wars could now be won with fewer troops, fewer casualties, and 'conflict termination' would take less time. As one skeptic sarcastically noted, "Not only did the military not want to fight long wars, it was so good that it didn't have to."

But US operational performance has proven to be a mixed blessing. On one hand, American military capabilities have proven so overwhelming that adversaries were literally and figuratively driven off the conventional battlefield. But on the other hand, US dominance changed the strategic context of the conflict environment. Prospective challengers have adapted so-called 'asymmetric' approaches in the form of complex irregular warfare – an approach that

¹³⁵ Lou DiMarco, "Losing the Moral Compass," Parameters 36, no. 2 (2006): 1.

¹³⁶ H. R. McMaster, Crack in the foundation: Defense Transformation and the Underlying Assumption of Dominant Knowledge in Future War (Carlisle, PA: US Army War College, 2003). COL McMaster ably explores the flawed underpinnings of Transformation.

William R. Hawkins, "Protracted War: The Real Revolution in Military Affairs," ARMY Magazine 56, no. 11 (November 2006): 11.

¹³⁸ Tom Donnelly, "Endurance Test", Armed Forces Journal (MAR 07): 42.

allows them to side-step or at least partially avoid the strengths of US military power. As a result, the US finds itself in its fifth year of bloody, protracted warfighting with 40% of its ground combat power committed indefinitely in two theaters of war. The Army, in particular, has not been particularly well suited for the stresses accompanying a prolonged conflict. In fact, General (Retired) John Abizaid candidly admits, "This is not an Army that was built to sustain a long war." 139

The operational endurance of military forces in a Long War can be measured in numerous ways. One revealing indicator is the capacity of the military to predictably rotate fresh forces into combat. More than its sister services, the US Army has been consistently challenged to meet this objective. The DOD was overly optimistic in its 2005 projections, and the QDR force outlay envisioned active duty Army units available for deployment once every four years. The Army's own projections were only slightly more realistic. The Army Force Generation (ARFORGEN) model was developed to synchronize the readiness of manpower and equipment for operations in Afghanistan and Iraq. Its goal was to stabilize personnel turbulence and have active duty units available for deployment once every three years. But currently units are deployed a year, back a year, and ready for deployment after another year. The ongoing 'surge' of 27,000 additional troops to Iraq has further stressed the ground components. In April 2007, the Department of Defense was forced to indefinitely extend unit deployments to 15 months. The tempo of deployments has obvious implications on the quality of life of military personnel, but there may be long-term institutional repercussions. What is sacrificed in the current deployment model is a recuperative period that allows for routine professional education and unit level training in critical tasks. The longer this trend continues, the more the practice may jeopardize tactical and operational performance, not to mention the health of the institution.

Equipment stores and maintenance systems are other tangible indicators of operational endurance. An army at war has a carnivorous appetite. The Army began the Iraq War with a \$56 billion dollar equipment shortfall, and high usage rates in the last few years have worn out equipment and depleted military stockpiles to dangerously low levels. How long will it take to reset the military and get things back to 'normal'? The Chairman of the Joint Chiefs, General Peter

¹³⁹ Thompson, "Broken Down", 16 April 2007, 31.

Senate Appropriations Subcommittee on Defense, televised hearing, CSPAN, 14 March 2007. Testimony provided by now retired General Peter Schoomaker. Summary of testimony can also be found in, "Chief Calls for Active Force of 565,000," AUSA News, 30, no. 3 (2007): 2.

¹⁴¹ Ibid.

Pace estimated that, "It will take end of war, *plus two years* to work off the backlog," to fully reconstitute the force in the wake of Iraq. 142

Lastly, procurement and modernization programs are signs that a military is continuing to prepare for the future. Despite delays to some of the major programs because of reallocation of funding, the modernization plans for the services continue unabated. But the immense inertia of the US military-industrial complex, the influence of Congressional interests, and the parochialism of the services call into question the integrity and the appropriateness of many of the modernization programs. Many critics think that the Pentagon is still investing a significant chunk of its budget in preparing for the 'wrong war.' Despite the realization that irregular warfare caught the military flatfooted, the Air Force continues to buy \$330 million fighters, and the Navy \$2 billion submarines. The Army remains tied to a \$160 billion investment in the Future Combat System, a linked network of 14 high technology ground vehicles and drones. ¹⁴³

US Tactical Effectiveness

Tactical effectiveness is narrowly focused on small-unit operations and the winning of battles and engagements. It is concerned with the capabilities of individual soldiers, the lethality of their equipment, as well as the performance of small-units and the viability of their tactics. Arguably, the US military allocates most of its money, time, and resources at the tactical level, especially during a time of war. The expenditure has paid huge dividends given the near total dominance it has achieved on the battlefield. Though US adversaries have certainly found lethal ways to engage US forces, the rarity of pitched battles in Iraq and Afghanistan serves as a reminder that America's enemies know their own relative weakness. Tactical effectiveness has proven a valuable deterrent.

The priority that the US military has placed on tactical performance over the past few years is plainly visible when one examines the costs associated with sending a soldier into battle. The cost of basic equipment (helmets, rifles, body armor) that soldiers carry into battle has more than tripled to \$25,000 from \$7,000 in 1999. The cost of a HMMWV, with all the added armor, guns, electronic jammers and satellite-navigational systems, has grown seven-fold to about \$225,000 per vehicle, from \$32,000 in 2001. The cost of paying and training soldiers has grown 60% to about \$120,000

¹⁴² House Hearing on the Department of Defense, televised hearing, CSPAN, 29 March 2007.

¹⁴³ Thompson, "Broken Down", 16 April 2007, 31.

per soldier, up from \$75,000 in 2001. 144 The return on investment is an experienced, high quality force that brings with it proven tactics and good leadership.

But of course, like the French Army learned in Algeria, the paradox of irregular war is that tactical victory is no guarantor of success. Especially in light of our accomplishments on the battlefield, Lieutenant General (Retired) David Barno cautions against "defining our war as the tactical battle we would like to fight rather than the strategic fight we are in..." 145

Summary and Implications

The current state of US military effectiveness may be roughly analogous to that of the French situation in 1957 at the height of the Battle of Algiers. At the time, despite some significant success on the battlefield, the French Army's effectiveness had begun to fade. Politically, they began to suffer the consequences from shortfalls in money, manpower, and popular support. Governmental turbulence and poor civil-military relations prevented strategic coherence, and poor decisions at the operational level undermined the legitimacy of the war effort. The illustration probably oversimplifies the case, but at some point in 1957, there were warning signs that the French military had crossed a dangerous threshold and entered a period of extreme vulnerability. By 1958, they experienced a drop off of military effectiveness from which they never recovered.

Using the Military Effectiveness Model to assess their performance to date, it appears that the US military now suffers from many of these same symptoms. Popular support for military operations is in decline and the requirements for funding and manpower are increasing. Given current fiscal realities, the money required to prevail is likely to jeopardize popular domestic programs. The demands for a high quality and quantity of manpower may threaten the viability of the all-volunteer military. The US struggles with incoherence at the strategic level and lacks a streamlined national security architecture that can articulate clear guidance to the defense establishment. The size of the armed forces is proving inadequate to the tasks assigned. Operationally, an overestimation of technological capabilities has produced a mismatch between doctrine and force structure resulting in tremendous stresses placed on the force. Equipment, units, and soldiers are simply wearing out faster than they can be replaced.

Greg Jaffe, "Despite Its \$168 Billion Budget, the Army Faces a Cash Crunch," Wall Street Journal (New York), 11 December 2006, sec. A, p. 4.

David W. Barno, "Challenges in Fighting a Global Insurgency," *Parameters* 36, no. 3 (2006): 28.

By individually evaluating the vertical levels of military activity, the Military Effectiveness Model provides a useful analytical device for assessing the efficacy of US efforts in the Long War. This somewhat cursory assessment of US military effectiveness does not suggest that the US is predestined to lose the Long War. Nor is it intended to render an authoritative judgment on whether the military is "stretched thin," "broken," or "hollow." What it does infer is that the process of converting national strategic raw materials into fighting power is getting more and more expensive for the US – in terms of both financial and human capital. The military is dangerously misallocating its finite resources far too heavily at the tactical end of the spectrum. But, victory at the lower (tactical) level can seldom compensate for defeat at the higher (political/strategic). The military effectiveness of US forces will continue to decline in the coming years, perhaps precipitously, unless the US rids itself of its tactical preoccupation and gets its priorities straight. This erosion presents a significant vulnerability for the nation in the years to come as it continues to fight what many see as a generational conflict.

BIBLIOGRAPHY

Baker, Jim. "Systems Thinking and Counterinsurgencies." Parameters 36, no. 4 (Winter 2006-07): 26-43.

Barno, David. "Challenges in Fighting a Global Insurgency," Parameters 36, no. 2 (2006): 15-29.

Biddle, Stephen and Stephen Long. "Democracy and Military Effectiveness: A Deeper Look." *Journal of Conflict Resolution* 48, no. 4 (2004): 2-15.

Bracken, Paul. "Net Assessment: A Practical Guide." Parameters 36, no. 2 (2006): 90-100.

Carafano, James J., and Paul Rosenzweig. Winning the long war: Lessons from the Cold War for Defeating Terrorism and Preserving Freedom. Washington, DC: Heritage Books, 2005.

Cohen, Eliot A.. Supreme Command: Soldiers, Statesmen, and Leadership in Wartime. New York: Anchor Books, 2003.

Cohen, Eliot A., and John Gooch. Military Misfortunes: The Anatomy of Failure in War. New York: Collier Macmillan, 1990.

Cook, Martin L. "Ethical Issues in Counterterrorism Warfare." In *Defeating Terrorism: Strategic Issue Analyses*, ed. John R. Martin, 71. Carlisle, PA: Strategic Studies Institute, 2002.

Cordesman, Anthony H. *Preliminary "Lessons" of the Israeli-Hezbollah War.* Washington, DC: Center for Strategic and International Studies, 2006.

_____. Winning the "Long War" in Iraq: What the US Can and Cannot Do. Washington, DC: Center for Strategic and International Studies, 2006.

Cox, Gary P. "Net Assessment." Airpower Journal 6, no. 2 (1992): 75-84.

Crane, Conrad C. Facing the Hydra: Maintaining Strategic Balance while Pursuing a Global War on Terror. Carlisle, PA: Strategic Studies Institute, 2002.

Cushman, John H. Challenge and response: Military effectiveness 1914-1945. Washington, DC: National Defense University,1988.

Defense Department Briefing on Troop Deployments. Televised briefing. CSPAN. 12 April 2007.

DiMarco, Lou. "Losing the Moral Compass." Parameters 36, no. 2 (2006): 63-76.

Donnelly, Tom. "Endurance Test." Armed Forces Journal (MAR 07): 40-48.

Dupuy, Trevor N. Understanding Defeat. New York: Paragon House, 1990.

Freier, Nathan. "Primacy without a Plan?" Parameters 36, no. 3 (2006): 5-21.

Henrikson, Thomas H.. Dividing Our Enemies. Hurlburt Field, FL: Joint Special Operations University, 2005.

Hoffman, Bruce. "Does our counter-terrrorism strategy match the threat?" In *Testimony before the House International Relations Committee*. Washington, DC: RAND Corporation, 2005.

Horne, Alistair. A Savage War of Peace: Algeria, 1954-1962. New York: Viking Press, 1978.

House Appropriations Subcommittee on Defense. Televised hearing. CSPAN. 29 March 2007.

House Armed Services Committee. Televised hearing, CSPAN, 23 January 2007.

Kelly, George A. Lost Soldier: The French Army and Empire in Crisis, 1947-1962. Cambridge, Mass.: M.I.T. Press, 1965.

House Hearing on the Department of Defense. Televised hearing. CSPAN. 29 March 2007.

Knox, Macgregor, and Williamson Murray ed. *The Dynamics of Military Revolution: 1300-2050.* New York, NY: Cambridge University Press, 2001.

Korb, Lawrence J. "How well can we fight? For how long?" In *National Security Strategy: Choices and Limits*, ed. Stephen J. Cimbala, 38-52. New York: Praeger, 1984.

Luttwak, Edward. Strategy: The Logic of War and Peace. Cambridge, Mass.: Belknap Press of Harvard University Press, 1987.

_____. The Grand Strategy of the Roman Empire from the First Century A.D. to the Third. Baltimore: Johns Hopkins University Press, 1976.

Macgregor, Knox, and Williamson Murray ed. *The Dynamics of Military Revolution*. Chicago: Cambridge University Press, 2001.

Mangum, Kevin. Maintaining the Legal High Ground: The Legal Implications to Using Force to Combat Terrorism. Carlisle, PA: US Army War College, 2003.

Margiotta, Franklin D. Brassey's Encyclopedia of Military History and Biography. Washington: Brassey's, 2001.

McMaster, H. R. Crack in the Foundation: Defense Transformation and the Underlying Assumption of Dominant Knowledge in Future War. Carlisle, PA: US Army War College, 2003.

Meese, Michael J. "Defense Decision Making Under Budget Stringency." Ph.D diss., Princeton University, 2000.

Melillo, Michael R. "Outfitting a Big-War Military with Small-War Capabilities." Parameters 36, no. 3 (2006): 22-35.

Millett Allen R. "Clausewitz Out, Computers In – Military Culture and Technological Hubris." *The National Interest*, June 1997, 28-33.

Millett, Allen R., and Williamson Murray. The Constraints on the Waging of War: Military Effectiveness in the Twentieth Century. Privately printed.1984.

Millett, Allen R., and Williamson Murray. Military Effectiveness. London: Allen and Unwin, 1988.

Mockenhaupt, Brian. "The Army We Have." The Atlantic Monthly, June 2007, 12-24.

Murray, Williamson, ed. A Nation at War in an Era of Strategic Change. Carlisle, PA: Strategic Studies Institute, 2004.

Murray, Williamson, and Richard H. Sinnreich, eds. *The Past as Prologue : The Importance of History to the Military Profession.* New York: Cambridge University Press. 2006

Murray, Williamson. "Military Culture Does Matter." ORBIS 7, no. 2 (1999): 23-28.

Naveh, Shimon. In Pursuit of Military Excellence: The Evolution of Operational Theory. Portland, OR: Frank Cass, 1997.

Nielson, Suzanne C. "Civil Military Relations Theory and Military Effectiveness." *Policy and Management Review* 10, no. 2 (2005): 5-28.

U.S. Congress. House of Representatives. House Armed Services Committee. *Posture Statement of General Peter Pace, USMC, Chairman of the Joint Chiefs of Staff.* 8 February 2006.

Paret, Peter. French Revolutionary Warfare from Indochina to Algeria: The Analysis of a Political and Military Doctrine.

New York: Published for the Center of International Studies, Princeton University, by F.A. Praeger, 1964.

Paret, Peter, Gordon A. Craig, and Felix Gilbert. *Makers of Modern Strategy: From Machiavelli to the Nuclear Age.*Princeton, N.J.: Princeton University Press, 1986.

Pollack, Kenneth M. Arabs at War: Military Effectiveness, 1948-1991. Lincoln, NE: University of Nebraska Press, 2002.

Record, Jeffrey. Bounding the Global War on Terrorism. Carlisle, PA: Strategic Studies Institute, 2003.

Remarks of Donald Rumsfeld. Kansas State University. Landon Lecture Series. 09 November 2006.

- Roche, James G. and Barry D. Watts. "Choosing Analytic Measures." *The Journal of Strategic Studies*, 14 (June 1991): 161-175.
 - Ryan, Alan. Thinking Across Time: Concurrent Historical Analysis on Military Operations. Duntoon, Australia: Land Warfare Studies Center, 2001.
 - Senate Appropriations Subcommittee on Defense. Televised hearing, CSPAN, 14 March 2007.
- Sullivan Bill RADM. "Fighting the Long War -- Military Strategy for the War on Terrorism." In *Executive Lecture Forum:*Radyanyi Chair in International Studies Mississippi State University, edited by Joint Staff, 1-27. Washington,
 DC: Joint Staff, 2006.
 - Sumida, Jon. "Pitfalls and Prospects: The misuses and Uses of Military History and Classical Military Theory in the Transformation Era." In *Rethinking the Principles of War.* Annapolis, MD: Naval Institute Press, 2005.
 - Summers, Harry G. On Strategy: A Critical Analysis of the Vietnam War. Novato, CA: Presidio Press, 1982.
 - Tellis, Ashley J., Janice Bially, Christopher Layne, and Melissa Mcpherson. *Measuring National Power in the Postindustrial Age.* Santa Monica, CA: RAND, 2000.
- Thompson, Mark. "Broken Down: What the war in Iraq has done to America's Army and how to fix it." *TIME*, 16 April 2007, 28-35.
 - Trinquier, Roger. Modern Warfare; a French View of Counterinsurgency. New York: Praeger, 1964.
- U.S. Congress. Senate. Committee on the Budget. Budgeting for Iraq and the GWOT: Testimony before the Committee on the Budget, 110th Cong., 1st sess., 06 February 2007.
 - U.S. Department of the Army. The Army Posture Statement. Washington, D.C., 2006.
 - U.S. Department of Defense. Quadrennial Defense Review Report. Washington, D.C., 2006.
 - Van Creveld, Martin. Command in War. Cambridge, MA: Harvard University Press, 1985.
- _____. Fighting Power: German and US Army Performance, 1939-1945. Westport, Conn.: Greenwood Press, 1982.
- von Clausewitz, Carl, Michael E. Howard, and Peter Paret. On War. Princeton, N.J.: Princeton University Press, 1984.
- Walker, David M. Global War on Terrorism: Observations on Funding, Cost, and Future Commitments --- Testimony before the Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Reform, House of Representatives. Washington, DC: Government Accountability Office, 2006.
- Wass de Czege, Huba. Understanding and Developing Combat Power. Fort Leavenworth, KS: privately printed, 1984.